

# Swindon & Wiltshire Local Skills Improvement Plan (LSIP)

## Prioritised Findings Documentation, Automotive

### 1. Introduction

The automotive sector in the UK has changed significantly in the past decade, with withdrawals from large scale manufacture, changes to legislation (in particular attached to the decarbonisation of transportation) and more recently attempts to meet demand in futureproofing the UK's ability to keep up with expected demand with varying degrees of success. Automotive manufacture turnover in 2019 was £78.9 billion, down 4% from the previous year, but wider automotive sector turnover was up 1.6% to £326.6 billion, with a GVA (Gross Value Add) to the nation of £58.2 billion<sup>1</sup>.

Please note that the subsection of this sector in the Swindon & Wiltshire region closer to manufacture and engineering has been incorporated into the 'Advanced Engineering & Manufacture Priority Needs' documentation for Swindon & Wiltshire, with this specific document more focussed on automotive sectoral activity attached to MRO, aftersales, aftermarket and transportation and therefore aligns most closely with the 2 digit SIC code '45 – Wholesale and retail trade and repair of motor vehicles and motorcycles', which includes sales, maintenance and aftermarket services and parts outside of retail . We expect to refine this understanding and breakdown throughout the project timelines following the initial report. According to the ONS<sup>2</sup>, Motor Trades within the South West added just over £2.2 billion GVA in 2020, significantly down from previous years, predominantly due to the impacts of the pandemic, with the years 2016-2019 averaging almost £3.1 billion GVA.

Total UK employment in Motor Trades for 2021 is estimated to be around 540,000m with the largest minority within maintenance and repair<sup>3</sup>:

	SIC 2007	Full Time Employees (000s)	Total Employment (000s)
2 digit SIC	3 digit SIC	All	All
45 – Motor Trades		428.8	540.6
	451 – sale of vehicles	155.4	185.5
	452 – maintenance and repair	173.4	228.3
	453 – sale of parts and accessories	92.7	117.1
	454 -sales and repair of motorcycles and parts	7.2	9.6

Although there have been recent significant changes to the wider Automotive sector nationally and regionally, activities aligned with the above Industrial classification are to a majority degree decoupled from changes to manufacture-side automotive industry due to focus on ongoing domestic needs,

<sup>1</sup> From SMMT economic analysis 2022, <https://www.smmt.co.uk/industry-topics/economy/>, in the public domain

<sup>2</sup> ONS Regional GVA May 2022, in the public domain

<sup>3</sup> ONS - GB level employment (thousands) by 2 and 3 digit SIC 2007 (full-time/part-time and public/private sector split, reference year 2021)

albeit impacted by the economic outlook and confidence of the wider populace. There are expected significant changes to this sector in the near future, primarily again attached to the decarbonisation of the UK's transportation and network (and in alignment with the LEP's analysis of green skills and jobs), but uncertainty in timescales and needs for change are balanced against current demand and frictions within the available labour market. The majority of the workforce in this sector are educated up to Level 3 standards, with or without appropriate qualifications, but the skills needed to remain economically active are aligned to the transition away from ICE vehicles and towards electrification and alternative fuels.

*The skills needs' risk within this sector is adapting current standards to meet both current and future demand.. The opportunity is to ensure the region can provide leading infrastructure and support within the decarbonisation of transportation and ensure there is an appropriate technician base for future growth in EV technology and needs. We therefore have three types of skills priority for this sector:*

- *Skills Shortage Occupations reflecting the current supply and demand,*
- *Skills for new technology (upskilling of existing occupations and new occupations), and*
- *Granular skills requirements reported by employers*

FE provision for this sector within the region is provided by both Wiltshire College & University Centre (Levels 1-3 at a number of their campuses) and New College Swindon (Levels 1 and 2). Wiltshire College has a specialist motorsport teaching centre based at Castle Combe racecourse. Swindon UTC also provides post 16 entry into Technical Engineering BTEC qualifications at present, including access to their automotive facilities.

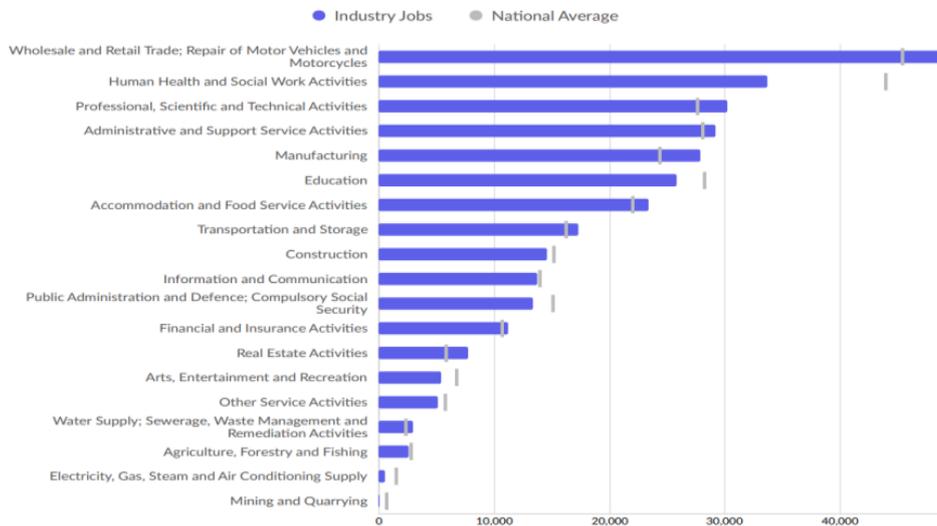
Please note that at this stage we have not divided skills needs into any of the subsectors within motor trades outside of any reported within the needs statements in Section 6; if we continue this activity into longer term LSIP delivery, we expect to divide reported needs into three digit SIC classification needs, alongside further delineation within Manufacture and Engineering roles.

## **2. Labour market intelligence trends for the Swindon & Wiltshire region**

The largest employment sector across the Swindon & Wiltshire region is the car industry in its broadest sense, but now in terms of wholesale, retail and repair services, whereas previously this was closer tied to manufacture, in particular prior to the closure of the Honda plant<sup>4</sup>. Nationwide trends are therefore broadly replicated within the Swindon & Wiltshire LEP region, with the 'Wholesale, and retail trade: repair of motor vehicles and motorcycles' section of employment providing approximately 48,000 roles, slightly above national averages. In this recent LEP 'skills volatility' analysis, communications, management and customer service have remained the most in demand pan-sector over the last 18 months. Taking Motor Trades GVA for the South West as a whole and dividing by total population for Swindon & Wiltshire suggests that the GVA added to the region is around £285 million per annum.

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<sup>4</sup> From [Swindon & Wiltshire LEP Labour Market report](#), March 2023 [Swindon & Wiltshire LEP Labour Market report](#), in the public domain



Taken from Swindon & Wiltshire LEP Labour Market report, March 2023

It is difficult to predict any regional change to this sector outside of UK averages, but we would expect demand change to be broadly in-line with these. However, the Department for Education 'Skills Imperative 2035' analysis expects 'wholesale and retail trade' employment in this region to grow at almost one third the rate of the average of the UK; 0.5% in comparison to 1.4%<sup>5</sup>.

### 3. Job postings and forecasts to meet replacement and expansion need (existing staff leaving the sector's workforce either into different sectors or retirements and new employment generation against expected sectoral growth).

The Institute of Motor Industry in 2022<sup>6</sup> predicted a labour market shortage nationally within Motor Trades of around 160,000 by 2031 'due to an aging population, decreased immigration and the green agenda 'creating a major skills challenge for the automotive labour market', with vehicle technicians representing 16% of the total vacancies, compounded by the 2030 change to sales of ICE private vehicles and a lack of new entrants to the workforce. 18% of the total workforce is over 55, indicating medium term needs for additional replacement demand.

According to this IMI research, the majority of recruitment needs are expected to be in replacement rather than expansion, with small percentages of growth expected nationally in vehicle body build and repair functions (2.5%) over 10 years, equating to 533 new jobs nationally (and therefore incalculable for the region with certainty). The total employment requirement from their analysis is 99,400 jobs, with only 4070 new roles created rather than replacement, meaning 96% of new roles created will be in replacement rather than expansion – this would mean a total of new roles for the region of approximately 1,143 over the next decade, indicating more need within existing workforce and training provision than new provision. The subsector predicting the largest fall is 'Sale of Cars and Light Motor Vehicles' with a fall of 6%.

Lightcast trends provided for the region by the LEP in March 2023 suggest that the Motor Trades workforce will remain reasonably static in the near future, but with slight growth in line with South West averages, and provided this breakdown of primary roles postings within the sector;

<sup>5</sup> DfE [Skills Imperative 2035 Report](#)

<sup>6</sup> From Creating long-lasting careers in a changing sector, IMI 2022 [https://tide.theimi.org.uk/sites/default/files/2022-06/IMI%20-%20Annual%20Research%20Report%202022\\_summary%20report.pdf](https://tide.theimi.org.uk/sites/default/files/2022-06/IMI%20-%20Annual%20Research%20Report%202022_summary%20report.pdf) in the public domain

Occupations Employed by this Industry	Employed in Industry	% of Total Jobs in Industry
Vehicle Technicians, Mechanics and Electricians	2,143	14%
Assemblers (Vehicles and Metal Goods)	976	6.4%
Vehicle and Parts Salespersons and Advisers	756	4.9%
Metal Working Production and Maintenance Fitters	515	3.4%
Sales Accounts and Business Development Managers	488	3.2%

#### 4. Occupational Priorities (shortages of occupations)

We have attempted below to show some of the existing roles' needs and forecast requirements to indicate where sectoral needs may be met via existing courses, with or without micro-interventions.

Below we have incorporated a table based on the IMI 2022 analysis of the sector nationally as representative of the workforce changes and current needs. We are aware that in maintenance and repair trades in particular, a significant amount of recruitment is via less formal routes and therefore online jobs postings may not present an accurate picture in terms of need.

We have attempted to RAG rate needs (Red, Amber, Green, with Red being highest) in terms of absolute numbers and percentage workforce requirements to highlight to most pressing existing role shortages within this sector.

UK working population 32.84 million (ONS 2022)

S&W working population 377,900: S&W total of UK is 1.15%

Role/Sub-sector	Need forecast	R	A	G	Priority/possible action and funding source. Growth in:
Automotive Retail – maintenance and repair – technician/ mechanic (inc. MOT testers) 2021 labour market 237,706 nationally, expected shortage by 2031 of 25,600 nationally	<i>Suggests current regional workforce of 2,730 and shortage of 294 by 2031. Replacement rate not known.</i>	x			Apprenticeships and 16 to 19 Vocational
Automotive Retail - sales 2021 labour market 182,691 nationally, predicted largest fall is the Sale of Cars and Light Motor Vehicles with a fall of 6%.	<i>Suggests current regional workforce of 2,100, estimated drop in regional employment of 125 in next decade, new role creation therefore sub 100</i>			x	Sales Executive L4 Apprenticeship or in house training and development
Wholesale and Retail Trade – parts and accessories	<i>Suggests current regional workforce of 1,160, new roles creation, therefore sub 50</i>			x	Possibly via Customer Service Specialist L3 Apprenticeship

100,919 jobs in 2021 nationally					
Renting and Leasing 48,278 jobs in 2021 nationally	Suggests current regional workforce of 555, negligible new role creation (5-15)			x	Business Administration Apprenticeship

## 5. Occupational Opportunities – Skills for new technologies

We can identify some of the more imminent technological needs within this sector and some of the expected changes to existing roles - there is current demand for all of these technologies but it is limited in volume. However it is expected that there will come a point relatively soon where many of these technologies will grow rapidly in volume, with timescales somewhat dependant on current Government initiatives, incentivisation, legislation and policy. The majority of change within this sector is attached to the decarbonisation and transition towards electric vehicles, predominantly battery but likely to include other fuels and fuel cells in less known quantities and timescales. There is also potential for adoption of 3D printing for components within manufacture, repair and replacement, alongside composites and new materials and internal facility and production decarbonisation.

Siemens 2022 Whitepaper ‘Decarbonising practises in the global automotive industry’<sup>7</sup> provides a good summary of these potential changes and technological advancements and the interoperability of sustainability and Industry 4.0 outside of direct skills needs in the labour market.

Not incorporated into the table below but potentially of note are some mentioned roles that have shown significant percentage but not volume growth nationally:

- *Plastics Process Operatives*
- *Quality Assurance Technicians*
- *Quality Control and Planning Engineers*

These are potential opportunities for the region to capitalise on in respect of innovation, start-up and scale-up provision and do not yet represent skills needs.

Right now our priority is that Colleges and other providers of training for these occupations gear up their practical facilities and as far as possible and begin (if not already), to offer the upskilling and awareness needed, alongside new occupational programmes where there is local demand or expected imminent local demand. We hope to have discussions with providers and stakeholders about how demand could be stimulated further and timing of growth.

Occupations	Applications within Motor trades Industry
<b>Technology</b>	
Electric Vehicle (EV) Growth - repair and maintenance, sales and aftermarket	Significant changes to technician, mechanic and MOT testing roles Expected differences in sales market and consumer expectations See priority 7 below
Other fuels (e.g. hydrogen)	Some subsectors of motor trades are expecting other fuels and fuel cell technology to be

<sup>7</sup> From Siemens 2022 Whitepaper ‘Decarbonising practises in the global automotive industry’  
<https://assets.new.siemens.com/siemens/assets/api/uuid:126d82a4-ff96-4d74-bf52-28281e719488/whitepaper-decarbonizing-practices-in-the-global-automotive-indu.pdf> in the public domain

	adopted more widely than battery EV, at present only pockets of industry need additional understanding (Heavy goods and logistics, freight, rail and other transportation MRO) See Priority 7 below
CAD & simulation, 3d printing and on-demand component production	Growth in expected needs from initial design phases through to licensed POD (print on Demand) franchiseship, likely >3 years for commercial viability
Car software Maintenance, Repair and Operations (MRO)	See Priority 7 below
Battery maintenance, replacement and disposal, specific roles/functions	Re-use (not mature yet) and end-life processing for EV market, significant potential for rare earth reprocessing (but currently no known significant relevant industry/R&D in region) See Priority 7 below
Aftermarket and new end-consumer technologies – integration and sales	Likely to be significant growth in consumer digital technology adoption alongside higher integration of digitalised consumer support and services See Priority 7 below

## 6. Businesses Reported Skills Needs - Granular Business Intelligence via LSIP

Please note that the LSIP research will continue until April 2023 in the first phase, with additional needs, refinements, deep dives and any identified new foci to continue longer term until May 2025. These below skills needs findings are based on the initial 3 months of LSIP research and delivery and hopefully indicate (in a no way comprehensive manner) expected 'direction of travel' in the final report. As any additional needs are identified and verified we will share prior to report release with stakeholders in the most appropriate identified means. Engagement within the automotive sector has been particularly difficult, with low take up of opportunities to engage one-to-one and in group contexts (focus groups, group interviews and sectoral immersion events).

The LSIP has worked to gather current in-depth business intelligence on perceived unmet needs, understanding of current delivery and potential economic and technological changes. The intention of the LSIP research methodology is to add current and granular intelligence to existing understanding and not to replace prior research into skills needs, particularly those datasets which could be considered statistically robust.

We have divided these findings into approximated areas of need, and -alongside the sections above on occupational shortages and industrial trends – expect these to form a reasonably comprehensive picture intended to address current and expected unmet needs within the sector, both in terms of interventions in existing provision (micro or modular) and identification of potential new provision (although this falls primarily towards in-work and modular needs due to the methodology utilised in the LSIP primary research phase). The areas these are outlined under are:

- Critical Workplace, Core and Transferable skills
- Core Digital Skills
- Sector Specific, Technological Change and Digitalisation Skills Needs
- Decarbonisation, Sustainability and Alignment to the UK's Net Zero Strategy Skills Needs
- *Systemic/Labour Market/Other reported needs*

We have indicated where we believe businesses have reported these needs most significantly in terms of where they fit within career and occupational progression (from new entrants through to experienced) and believe these are areas of funding and provision that align more or less closely:

Experienced Current Employees (upskilling, modular, CPD)	Experienced/Occupationally Competent New Employees (upskilling, skills gaps, new work functions)	Career movers from another sector (part experienced and/or direct/linked training eg Boot Camps)	Those in both work and formal training e.g. apprentices	Younger/New Entrants/non-experienced 16-19 and adults
In-house, innovation/AEB/LSIF	In-house/bespoke/Innovation/AEB/LSIF	AEB, Bootcamps, Other DfE e.g. certificates of future technology, In-house, LSIF	Apprenticeship	T Levels, other 16 to 19 vocational, Vocational HE and preparatory

We do not intend to be prescriptive in suggestions where FE Providers (and others) may see an ability to respond to LSIP skills needs findings, more to indicate where we see opportunities for action that align with occupational progression, life stages and current (particularly mainstream) funding mechanisms. These therefore represent the options we want to discuss with providers.

Employers have expressed a strong view that young recruits are often not work ready in terms of essential skills and work related basic digital skills. It is therefore a priority for us to explore the possible implementation of "Skillbuilder" essential skills system (or similar) into pre-16 and academic post-16 education across the area. We would also aim to build these skills into post 16 vocational programmes and Apprenticeships (where they are not already there) so that employers themselves will also continue to develop these skills in the workplace.

There is wide recognition within the sector that a number of key and reasonably mature technologies are likely to be incorporated into this sector much more comprehensively, although there is some reticence to adopt too widely until demand signals turn into actual demand, particularly against balancing current demand in traditional needs with lack of available workforce and demand for service provision for new technological advancements.

## Critical Workplace, Core and Transferable Skills

Need Statement	PROVISIONAL PRIORITY	Experienced Current Employees (upskilling, modular, CPD)	Experienced/Occupationally Competent New Employees (upskilling, skills gaps, new work functions)	Career movers from another sector (part experienced and/or direct/linked training eg Boot Camps)	Those in both work and formal training e.g. apprentices	Younger/New Entrants/non-experienced (16-19) and adults
Core/soft skills reported as needing further development in new entrants include: <ul style="list-style-type: none"> <li>• Communication</li> <li>• English and functional numeracy (L2)</li> <li>• Independence and problem solving/critical thinking/common sense</li> <li>• Observation and diagnosis</li> </ul>	<b>1. Explore the implementation of Skillbuilder (or similar) and work entry skills in pre 16 and post 16 academic education. (This issue has arisen in all our priority sector with slightly different emphasis for each sector, on the specific skills involved)</b>					X

• Time management • Physics understanding						
Additional requirements in sector for administration skills, project planning & management	<b>2. Short course programme in partnership with employers</b>	X	X	X	X	
Wider requirements for client handling, commercial skills, sales/aftersales, negotiation and relationship management for non direct sales staff [?]	<b>As 2 above, in commercial and sales/customer service skill</b>	X	X	X	X	
Needs for upskilling in existing workforce towards management, leadership and supervisory roles	<b>3. Tailored Apprenticeship programme for upskilling to supervision and management. May also be options for short course upskilling for some staff</b>	X		X		
Support for senior roles in planning internal upskilling and reskilling, including mentoring support and embedding continuous learning	<b>4. Short workshops for senior management on workforce development planning, implementation and mentoring</b>	X		X		
More availability of modular learning in finance, compliance, tax & legislative change, franchising, incentive availability	<b>Part of 2 above</b>	X	X	X	X	
Some senior need for diversity, inclusion and neurodiversity	<b>Part of 4 above</b>	X		X		

## Core Digital Skills

*NB some employer reported needs will need further exploration to define how substantial they are. If they are not amendable to short programmes, in some case new Apprenticeships may need to be implemented eg in Cybersecurity.*

Need Statement	<b>PROVISIONAL PRIORITY</b>	Experienced Current Employees (upskilling, modular, CPD)	Experienced/Occupationally Competent New Employees (upskilling, skills gaps, new work functions)	Career movers from another sector (part experienced and/or direct/linked training eg Boot Camps)	Those in both work and formal training e.g. apprentices	Younger/New Entrants/non-experienced (16-19) and adults
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Core digital systems requiring additional training include: <ul style="list-style-type: none"> <li>• Outlook and office 365</li> <li>• Phone support and sales</li> <li>• General IT literacy</li> <li>• Teams</li> </ul>	<b>5. Training in basic and practical digital skills both in the workplace and where not already in place, in FTE</b>	x	x	x	x	X
Additional requirements in data protection, GDPR, security/cybersecurity, privacy	<b>6. IT and data developments training events programme for IT support and some management roles</b>	x	x	x		
Amazon Web Services (AWS), Cloud computing principles, cloud handling, IP protocols in some (mostly core) roles	<b>Part of 6 above</b>	X	x	x		
Needs for additional project management platforms/systems – Azure, Learner Management Systems (such as PIX and Moodle), garage management/workflow system principles	<b>Part of 6 above</b>	x	x	x		
Presentation and visualisation systems and skills, including towards marketing and social media, such as Miro and Powerpoint	<b>Part of 5 above</b>	x	x	x	x	x
Managing remote and hybrid working practises	<b>Part of 2 above</b>	x	x	x	x	
Understanding purchasing systems, invoicing, billing & procurement	<b>Part of 2 above</b>	x	x	x	x	

## Sector Specific and Technological Change

Need Statement	PROVISIONAL PRIORITY	Experienced Current Employees (upskilling, modular, CPD)	Experienced/Occupationally Competent New Employees (upskilling, skills gaps, new work functions)	Career movers from another sector (part experienced and/or direct/linked training eg Boot Camps)	Those in both work and formal training e.g. apprentices	Younger/New Entrants/non-experienced (16-19) and adults
Significant need for new technicians and maintenance operatives, with significant expected needs for upskilling existing roles	<b>See occupational skills shortage above</b>				x	
Coding and software development – full stack development, python, C++, Azure	<b>Part of 6 above</b>	X	x	x		
CAD, simulation, VR as tool and product	<b>7. Technical upskilling programme for technicians (and build into current Apprenticeships)</b>	x	x		x	X
Changes to energy and fuel systems – electrification, alternative fuels such as hydrogen and potential impacts and timescales	<b>Part of 7 above</b>	x	x		x	X
Within electrification, additional specificity attached to; <ul style="list-style-type: none"> <li>• battery technology (and MRO),</li> <li>• high voltage systems,</li> <li>• hybridisation,</li> <li>• understanding of long-term sector impact</li> <li>• infrastructure and wider transportation sector changes</li> </ul>	<b>Part of 7 above</b>	X	X		X	X
Shift MRO qualifications towards a broader focus on the combination of soft, social, commercial and technical skills (replication of “the RAC model”)	<b>Part of 2 above</b>	x	x		x	x
Wider sectoral needs for data analytics, diagnostics, interpreting data –	<b>Part of 6 above</b>	X	x	x		

maintenance and aftermarket needs						
Electrified systems, maintenance and mechanical engineering technical qualifications (reported L3-4) lagging behind sector technological changes	<b>Part of 7 above</b>	x	x		x	x
Impact of 5G and fibre connectivity on automotive technology	<b>Part of 7 above</b>	x	x		x	X
Additional needs for transformation foresighting and impact on MOT processes and requirements	<b>Part of 4 above</b>	x		x		
Senior roles need for innovation adoption in sector and commercialisation of opportunities	<b>Part of 4 above</b>	x		x		
Some employers report additional needs attached to bodywork roles	<b>8. Explore further needs in body work</b>	x	x		x	

## Net Zero Skills

Need Statement	PROVISIONAL PRIORITY	Experienced Current Employees (upskilling, modular, CPD)	Experienced/Occupationally Competent New Employees (upskilling, skills gaps, new work functions)	Career movers from another sector (part experienced and/or direct/linked training eg Boot Camps)	Those in both work and formal training e.g. apprentices	Younger/New Entrants/non-experienced (16-19) and adults
Understanding energy usage and efficiency	<b>9."Achieving net zero" short workshops programme open to all managers and staff</b>	x	x	x	x	X
EV sectoral transformation and impact, embedding change within facility: battery technology, MRO, alignment to Net Zero Strategy, charging infrastructure (see also electrification needs above)	<b>Part of 9 above</b>	x	x	x	x	x
General 'green skills' and awareness of individual impact on sustainability	Part of 9 above	x	x	x	x	x
Limited needs for further understanding waste and	<b>Part of 9 above</b>	x	x	x	x	x

recycling best practise (MRO employers)						
Sustainability assessment and lifecycle analysis	<b>Part of 9 above</b>	X	X	X	X	X
Communicating Net Zero and change, internal and external clients	<b>Part of 9 above</b>	X	X	X	X	X
Greater awareness of expected/potential changes such as hydrogen as a fuel	Part of 9 above	X	X	X	X	X

## Local Skills & Labour System Feedback

*Please note that although these are not explicitly skills needs, these are other issues highlighted by employers and stakeholders that may require addressing alongside interventions in provision directly.*

Need Statement	PROVISIONAL PRIORITY	Experienced Current Employees (upskilling, modular, CPD)	Experienced/Occupationally Competent New Employees (upskilling, skills gaps, new work functions)	Career movers from another sector (part experienced and/or direct/linked training eg Boot Camps)	Those in both work and formal training e.g. apprentices	Younger/New Entrants/non-experienced (16-19) and adults
Blended, flexible and modular training is preferred methodology alongside in-house upskilling	<b>See all above</b>	X	X	X	X	X
Lack of new entrants and ability to recruit highlighted as issue, prior to expected needs attached to EV transformation – current demand for traditional automotive services removes need for reskilling	<b>See occupational skills shortages above</b>				X	X
A number of employers highlighted issues with teaching salaries and ability to encourage industry professionals into education	<b>10. Explore cross area initiative on teacher recruitment and retention in FE (arises in other priority sectors)</b>					
SMEs reported struggling to manage apprenticeship requirements, shared schemes mentioned as preferred route, lack of	11. Explore further to find out exactly what the problems are.					

understanding of levy, some expectations this will change in near future						
Disconnect between expectations of EV transformation and consumer demand	<b>12. Gear up training facilities (preferably in partnership with employers) and offer as in 7 above</b>					
Lack of awareness in new entrants/early stage interventions of career pathways and progression opportunities	<b>For Part C LSIP</b>					
SME market (partic. In MRO) relies more on informal recruitment methods	<b>For Part C of LSIP</b>					
Some employer concerns with changing workforce expectations (younger entrants) in flex and hybrid work, ability to balance shift work and in-person role requirements	<b>For Part C of LSIP</b>					