



*addressing automotive skills challenges*



***Automotive Council Skills Working Group***

***Presentation to NAA.***

***Simon Farrall***

***Vice-Chair Auto-Council SWG***

***5<sup>th</sup> May 2017***

## A Skills Crisis or Problem?

The gap between the growth in demand and the growth in supply of talent 2011 to 2021  
(Red indicates a trend deficit, green a trend surplus, yellow a broad balance. Numbers are annual %ages)

*“The single biggest strategic challenge for advanced manufacturing in the UK is the availability of skilled people, at both technician (Advanced Apprentices) and degree level.”*

### The Wright Review of Advanced Manufacturing in the UK and it's Supply Chain - 2014



Source: Engineering UK 2014: The State of Engineering

# Automotive Council

## Development and Structure

### Development



2009

### Publication



2013

### Delivery

Technology Group



Supply Chain Group



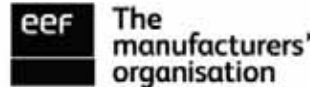
Business Environment and Skills Group



2014 onwards

Auto-Council SWG reports within Business Environment and Skills

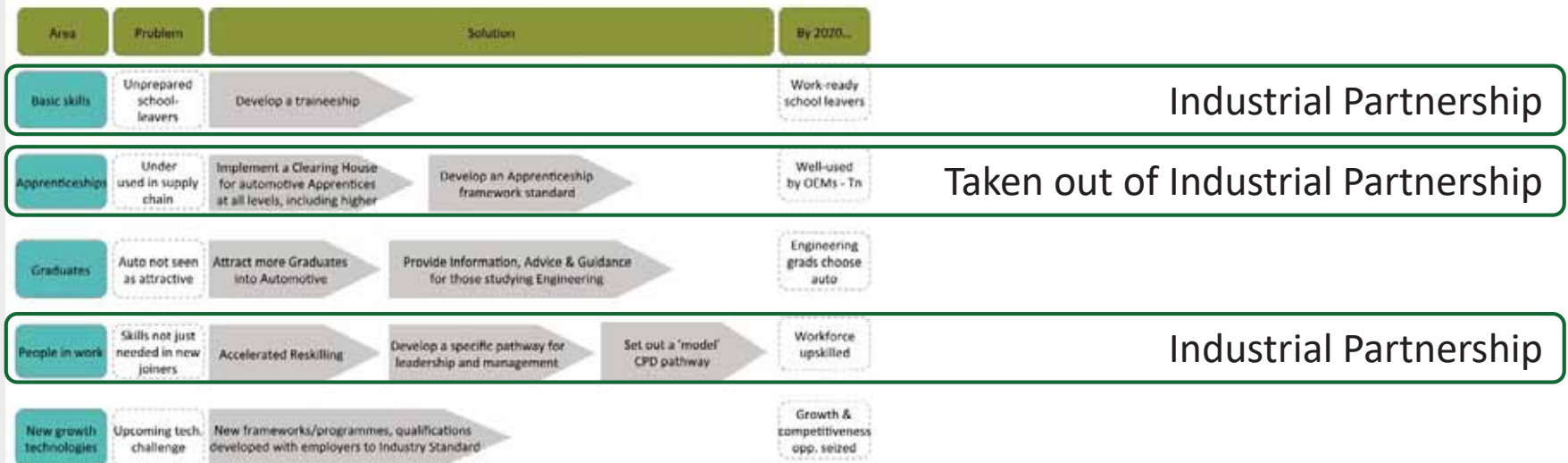
# Auto-Council SWG – sustained membership and attendance.



Supported by:



# Auto-Council SWG – first skills roadmap formed basis of funded Industrial Partnership



Underpinned by UK Auto skills infrastructure research project – identifying geographical needs and provision and creating standardised job descriptions for specific families of roles (eg, production, quality, etc). Reports are available on a regional basis.



# Auto-Council SWG – skills infrastructure output

The output of this work is available at the following website:

<http://www.automotiveip.co.uk/>

## Appendix 1

### The Automotive Industry Job Framework

Job Family	Specialist Family	Engineering (PE)				Materials Planning & Logistics (PML)			
Sub-Family		Process (PE)	Design & Development (DD)	Programme (PP)	Production Engineering (PE)	Capacity (C)	Materials Planning (MP)	Logistics (L)	Warehousing (WH)
Lead Engineer	Lead Engineer	Lead Engineer	Lead Engineer	Lead Engineer	Lead Engineer	Lead Engineer	Lead Engineer	Lead Engineer	Lead Engineer
Senior Engineer	Senior Engineer	Senior Engineer	Senior Engineer	Senior Engineer	Senior Engineer	Senior Engineer	Senior Engineer	Senior Engineer	Senior Engineer
Engineer	Engineer	Engineer	Engineer	Engineer	Engineer	Engineer	Engineer	Engineer	Engineer
Senior Technician	Senior Technician	Senior Technician	Senior Technician	Senior Technician	Senior Technician	Senior Technician	Senior Technician	Senior Technician	Senior Technician
Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician
Senior Technician	Senior Technician	Senior Technician	Senior Technician	Senior Technician	Senior Technician	Senior Technician	Senior Technician	Senior Technician	Senior Technician
Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician
Senior Technician	Senior Technician	Senior Technician	Senior Technician	Senior Technician	Senior Technician	Senior Technician	Senior Technician	Senior Technician	Senior Technician
Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician

Job Family	Specialist Family	Production (PE)		Management Systems (MS)		Supplier Quality (SQ)	
Sub-Family		Production (PE)	Quality (Q)	Management Systems (MS)	Supplier Quality (SQ)	Supplier Quality (SQ)	Supplier Quality (SQ)
Lead Engineer	Lead Engineer	Lead Engineer	Lead Engineer	Lead Engineer	Lead Engineer	Lead Engineer	Lead Engineer
Senior Engineer	Senior Engineer	Senior Engineer	Senior Engineer	Senior Engineer	Senior Engineer	Senior Engineer	Senior Engineer
Engineer	Engineer	Engineer	Engineer	Engineer	Engineer	Engineer	Engineer
Senior Technician	Senior Technician	Senior Technician	Senior Technician	Senior Technician	Senior Technician	Senior Technician	Senior Technician
Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician
Senior Technician	Senior Technician	Senior Technician	Senior Technician	Senior Technician	Senior Technician	Senior Technician	Senior Technician
Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician
Senior Technician	Senior Technician	Senior Technician	Senior Technician	Senior Technician	Senior Technician	Senior Technician	Senior Technician
Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician

## Appendix 6

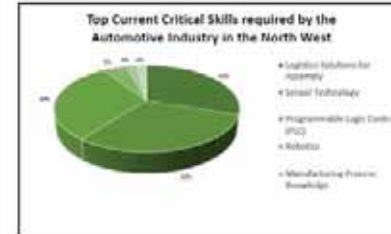
### Advisory of overall training provision by sub-region

Ratio of all HE, FE, apprentice and other learners undertaking training relevant to the automotive industry as a proportion of automotive employment by sub-region.

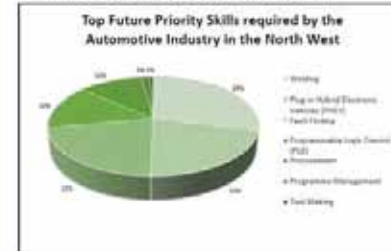
Advisory of Provision Learner to Employment Ratio by LEP



### Top Current Critical Skills required by the Automotive Industry in The North West



### Top Future Priority Skills required by the Automotive Industry in The North West





## *Basic skills - Art of Manufacturing, Industrial Cadets and 19+ Bespoke Manufacturing*



### **Objective**

To raise awareness of auto careers and provide young people with hands on experience of the industry in action.

### **Status**

- 7,700 young people have benefited.
- Nissan's resources and learnings shared with other OEMS who are developing their own school engagement programmes.
- Programmes will continue until at least 2018.

## *People in Work - Piloting Pro-Lead, Advanced Problem Solving, Management & Leadership, Pre-employment Upskilling*



### **Objective**

Design and test qualifications that upskill existing employees and develop new entrants with transferrable skills from other industries.

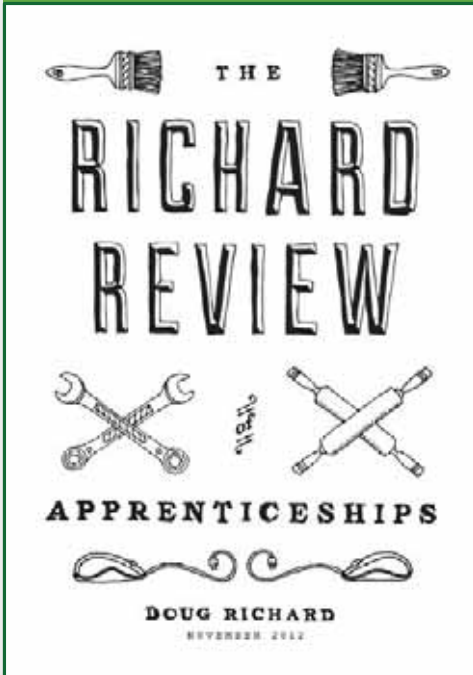
### **Status**

- Over 1,700 learners have benefited.
- Over £10m in quality cost savings have been generated for supply chain through the Advanced Problem Solving programme.
- Working with SFA on future availability and sustainability of programmes.



## Auto Trailblazer Apprenticeships

2012 – Doug Richard’s review of apprenticeships in the UK was published, recommendations, included more employer ownership, some employer funding, grading, end point assessment, etc. and was broadly welcomed by employers.



- In Oct 2013 Automotive was 1 of 8 Trailblazer Pilots initiated by BIS.
- Trailblazer groups include employers, their representatives, providers, funding bodies, sector skills councils, etc.
- In 2017, the Auto Trailblazer has about 25 active participants, attendance normally 15-20 every 2 weeks – well networked with other Trailblazers.
- Are there to create new apprenticeship standards, which:
  - Must be written on 2 sides of A4.
  - Specify on the job competences.
  - Do not necessarily need to include qualifications.
  - Must include a final test of competence.

Auto Trailblazer group is of the view that the whole industry needs support and that general synergies to engineering and manufacturing are important – new members are always welcome.

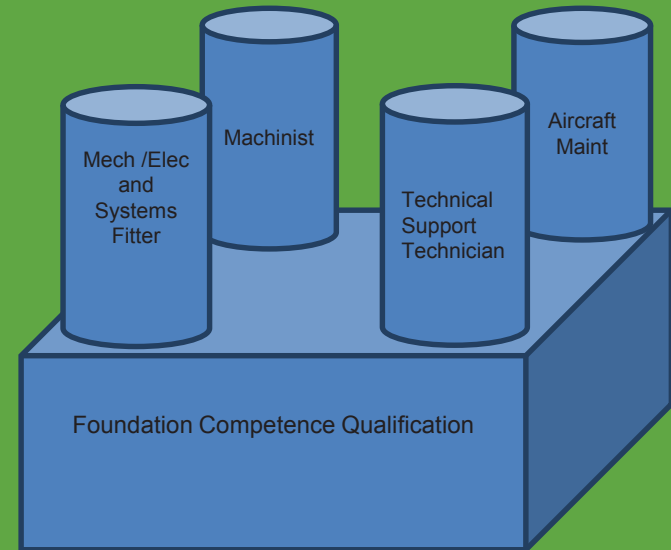
# Auto Trailblazer Apprenticeships

Job framework from the AIP used as the reference model for the roles to which apprenticeships should now lead – this is done by the “Battersea model” in which foundation qualifications are built into specialist disciplines.

Automotive Industry Job Framework																								
Apprentice level	National Qual level	Career level	Eng Job Family Pillar					Purchase Pillar		MPL Pillar				Quality Pillar				Manufacturing Pillar						
			J.R.B Level					J.R.B Level		Toyota Level				BMW Level				Siemens Level (to be discussed?)						
			Prod Body	Res	Des	Prog	Tool/Fac Eng	PH	CE	Prod Body	CP	MP	Log	Vis	Prod Body	ME	SG	QA	QPS	Prod Body	Plant	AGS	TOOL	FAWI
PGA	7	Employment Even	R2/Eng Qual Programmer												R2/Eng/Qual/2 Eng/3 Eng/4 Eng/5 Eng				R2/Eng/Qual/2 Eng/3 Eng/4 Eng/5 Eng					
DA	8	Head Tech Expert 3	L3/Prod/Dev/Eng												R2/Eng/Qual/2 Eng/3 Eng/4 Eng/5 Eng				R2/Eng/Qual/2 Eng/3 Eng/4 Eng/5 Eng					
HA	5	Principle emp/ Manager	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HA	4	TL Service tech or Master practitioner	L3/Prod/Dev/Eng												R2/Eng/Qual/2 Eng/3 Eng/4 Eng/5 Eng				R2/Eng/Qual/2 Eng/3 Eng/4 Eng/5 Eng					
AA	3	Senior trade with an apprentice practitioner	L3/Prod/Dev/Eng												R2/Eng/Qual/2 Eng/3 Eng/4 Eng/5 Eng				R2/Eng/Qual/2 Eng/3 Eng/4 Eng/5 Eng					
SA	2	Operative	L2/Eng/Qual/2 Eng/3 Eng/4 Eng/5 Eng												R2/Eng/Qual/2 Eng/3 Eng/4 Eng/5 Eng				R2/Eng/Qual/2 Eng/3 Eng/4 Eng/5 Eng					
	1	Trainee	NA suitable for traineeship												R2/Eng/Qual/2 Eng/3 Eng/4 Eng/5 Eng				R2/Eng/Qual/2 Eng/3 Eng/4 Eng/5 Eng					

Explains the "Battersea Model" as common foundation along with career

Continuation of framework for other Job Family Pillars including Apprenticeship level progression ranging from Level 1 to Level 7



# Working – with the Institute for Apprenticeships

## ***Institute for Apprenticeships***

- ***Institute for Apprenticeships Board Announced***

*Dr Katherine Barclay, chair of the life science and industrial sciences apprenticeship Trailblazer group*

*Sir Gerry Berragan, former British Army adjutant-general and apprentices ambassador*

*Bev Robinson, principal of Blackpool and the Fylde College, and director of the National College for Onshore Oil Gas*

*Paul Cadman, HR director for Walter Smith Fine Foods, and one of the government's apprentice ambassadors*

*Dame Fiona Kendrick, chair and CEO of Nestle UK and Ireland*

*Dame Asha Khemka, principal and chief executive of West Nottinghamshire College Group*

*Robin Millar, chair of Blue Raincoat Chrysalis Group*

*Toby Peyton-Jones, HR director for Siemens in the UK and North-West Europe*

***Sector and region are well represented on this board – strong links exist between individual companies and sectors are used to reinforce messaging.***

***This sort of engagement can bring significant benefits – 40% uplift in cap values on L3 technical apprenticeships.***

# Automotive Apprenticeship Matching Service



## Objective

To redirect high quality talent from over-subscribed apprenticeship programmes to other auto companies with opportunities.

## Status

- Launch 12<sup>th</sup> April 2016 - [www.automotiveapprenticeships.co.uk](http://www.automotiveapprenticeships.co.uk)
- Set to benefit 10,000 apprentice candidates per year.
- Creating a commercially viable system with potential to be extended to additional automotive priority areas, wider engineering and other sectors.

## On line resources

- **The Automotive Industrial Partnership website itself is:**  
<http://www.automotiveip.co.uk/>
- **In particular the reports of interest which are structured by LEP area include:**
- **Jobs and skills report**
- **Training provision report**



### About the Automotive Industrial Partnership

The UK's automotive manufacturing industry is thriving but to ensure we remain globally competitive, having a highly skilled and adaptable workforce is critical.

The Automotive Industrial Partnership was established by the Automotive Council in 2014, bringing together leading automotive companies and government to ensure the UK's automotive sector has the pipeline of skills talent it needs now and for the future.

- **The Automotive Apprenticeship Matching Service website is:**  
<https://automotiveapprenticeships.co.uk/>
- **Launch video**



# Automotive Council SWG/AIP Skills Roadmap Update October 2016

## Theme

- Identify funding opportunities for all SWG priorities.
- Agree cross-themed link to Apprenticeship Levy.
- A cross-themed communications plan, developed and agreed as a priority.
  - Brexit

## Vision

### Early Careers & Graduates

Desk based research of existing careers. Identification of research partners and channels.

Identify careers roadmap with decision points, stakeholders & routes incl, Apprenticeships & Graduates

Evaluate potential for scaling existing high performing projects & identify existing significant engagement activity

Secure funding & commitment for development plans, develop and implement new strategy and support existing.

To increase the number of young people selecting the automotive sector as their career

### Apprenticeships

Use AIP job/skills framework to understand where current standards fit and where new ones should be created

Develop & submit a 'mass' Expression of Interest to BIS to cover all of 'matrix' for Automotive. Develop apprenticeship standards for sector

Assessment strategies to meet upskilling & reskilling requirements supporting all age apprenticeships

Increase quality and availability of provision for automotive supply chains

To ensure Apprenticeships within the sector address industry skills needs supported by the Apprenticeship levy

### People in Work

Agree mechanism & process of working across themes and SWG. Agree roadmap structure and key priorities.

Re-evaluate and adapt Initial survey. Regular interaction between SWG and Auto Council WGs; agreeing plan by end 2016

Increase amount of automotive companies engaged with relevant provision locally, regionally and nationally

Create a map of automotive focused provision that supports the AIP workstreams with direct links

To develop the opportunities and solutions for upskilling the current workforce to address current and future automotive skills challenges

### Infrastructure & principles

Expand SWG representation, formalise engagement with AC WGs & LEP Leadership Forum

Establish plans and process for surveying on skills issues. Establish plan for rolling out AIP programme

Continue AIP website and wider communication

Carry out Apprenticeship Levy awareness & support campaign aimed particularly at SME employers

To enable a short, medium and long-term collaborative approach to addressing the automotive skills challenge, both current and future

2016/17

2025

Short

Medium

Long-term

for Skills

## ***Auto-Council SWG – what we can do for you***

- Access skills, provision and job framework data created during the AIP.
- General source of advice and guidance around skills, funding, levy, policy, etc.
- Make available the training products developed within the AIP – albeit not all can be levy funded.
- Integrate your requirements around the development of future apprenticeship standards, make available to you the standards that are already approved.
- Network you with providers and other organisations with similar problems.
- Provide you with candidate apprentices via the Automotive Apprenticeship Matching Service.