The STEM skills that were needed but were found to be in short supply or missing;

Supporting documents for this submission are on the Staffordshire County Council website.

Ambitious plans to grow Stoke-on-Trent and Staffordshire’s local economy by 50 per cent and generate 50,000 new jobs within 10 years are set out in the LEP’s strategic economic plan. Key to this is the creation of higher-level jobs in the advanced manufacturing and engineering (AME) sector. However, the proportion of the working-age population qualified to NVQ Level 4 or above is below the national average, so work is underway to make sure local people are better equipped for this growth.

The most recent forecasts indicate that over the next 10 years Stoke-on-Trent & Staffordshire will need 2,600 trained engineers every year for ten years to replace the existing workforce and meet the growth in the sector. Based upon these estimates the skills system will require a significant increase in engineering training provision to meet this demand.

How this particular skills need has been addressed, including specific details of the measures introduced (e.g. whether the measures are focused on developing generic skills (such as management), sector-specific skills or raising awareness, how they have been implemented and delivered, and how many people have taken/are currently taking part).

**STEM Strategy**

The Stoke-on-Trent & Staffordshire LEP Education Trust has developed a STEM Strategy that provides a coherent strategic approach, driven by local employer workforce requirements, to ensure that the education and skills in Stoke-on-Trent and Staffordshire are able to deliver growth and success within science, technology; engineering and maths (STEM) related industries.

It will direct educational policy on student subject opportunities, information, advice and guidance (IAG), curriculum design and delivery. It will enable students to understand and make the best subject choices for their studies. We aim to have significant numbers of young people leaving education with the skills and learning suitable to grow a successful, enterprising and exciting economy in Stoke-on-Trent and Staffordshire. In doing so, we will reduce the skills gaps and shortages in engineering and advanced manufacturing.

We want to achieve a joined up and effective education and skills pathway into engineering, science and technology careers and by doing so strengthen the economic position of Stoke-on-Trent and Staffordshire.

The strategy details success measures and key areas of action for employers, schools, apprenticeships, Further Education institutions and Higher Education institutions.

**Advanced Manufacturing & Engineering Hub**

Through the City Deal and Growth Deal £8.5m capital funding has been secured alongside £5m private sector investment to develop the Advanced Manufacturing and Engineering (AME) Hub over 2 phases between 2014 and 2017. Its purpose is to increase skills in the sector to provide employers with a suitable workforce to achieve economic growth. The AME
hub will provide world class vocational environments, with state of the art facilities in local communities linked to key employers, providers, schools and colleges. The first phase offers specialist provision in automotive and hybrid technologies delivered by Martec Training; renewable pneumatics and hydraulics delivered by Stoke-on-Trent College; and robotics, CNC milling, 3D printing and mechanical engineering delivered in Tamworth by South Staffordshire College. The three phase one providers had a collective annual target of delivering learning programmes to 2,199 learners once fully operational (in the 2015-16 academic year), an increase of 951 against 2013-14. Despite significant reductions to the adult skills budgets, in the first year of operation they delivered training for 780 16-19 year olds, 247 adults and 560 traineeships and apprenticeships. This represented an increase of 339 learners in total, 27 per cent up on the previous year.

Phase 2 is in development and will be completed in 2016-2017 and will include a £5.5m AgriSTEM Academy in Penkridge, a £3.5m STEM/AMD Centre in Stafford and £1.5m Advanced Apprenticeship Academy in Rocester. The phase 2 projects are collectively targeted to deliver to an additional 850 Traineeships/Apprenticeships and engage an additional 250 employers by September 18.

A cost benefit analysis has been completed using the New Economy Manchester Cost Benefit analysis tool, to determine the economic and fiscal value of the collective additional learner qualifications gained as an output of AME hub phase 1 and the forecast learner qualifications for the AME Hub phase 2 projects. The outcome of this analysis is that the economic value over 15 years is £116m and the fiscal value of the same duration is £24m.

**Education Business Partnership, JLR centre**

Jaguar Land Rover is working in partnership with Staffordshire County Council, Wolverhampton City Council and South Staffordshire Council to operate an Education Business Partnership Centre at its Engine Manufacturing Centre on the i54 development site. This Centre promotes careers in civil engineering and advanced manufacturing and it is delivering interactive learning programmes to schools, colleges and universities. These sessions are delivered in a real business environment and will be suitable for all ages, abilities and qualification levels. A programme of activities is promoted to education institutions and they will have the opportunity to book onto workshop programmes and get involved with a range of activities from engineering to business and career challenges. Over 1,400 students have engaged in the programme to date and the JLR centre has received over 70 visits from school groups.

**JLR Sector Based Academy**

The JLR sector-based work academy has been done in partnership between: Staffordshire County Council; Wolverhampton City Council; South Staffordshire Council; DWP Jobcentre Plus; City of Wolverhampton College; and South Staffordshire College (hereafter referred to as ‘the Partners’).

The Partners requested in 2014 the opportunity to support the recruitment of the 600 semi-skilled manufacturing roles over the next four years into the new JLR Engine Manufacturing Centre on the i54 site. A support package was proposed and agreed for residents of Staffordshire and Wolverhampton and it is being implemented by working in partnership with JLR’s recruitment agency, Manpower, to help develop the necessary skills, attitudes, values and job search training of local resident jobseekers. The delivery mechanism used is the sector-based work academy model with the training and support elements funded via the two local colleges using adult education budget (previously adult skills budget) allocated via
Written evidence submitted by Staffordshire County Council (GAP0041)

the Skill Funding Agency. Over 230 candidates to date have completed the support programme and almost 50% of the candidates who passed the programme have received offers of employment.

The cost of the measures and how they have been funded.

Advanced Manufacturing & Engineering Hub

The City Deal Powerhouse for Skills secured an investment of £2.9m to create phase 1 of the AME Hub. This included £1.45m from government, supported by £1.45m match from the council, local colleges and the private sector. The Growth Deal provided an investment of £10.4m for phase 2 of the AME Hub, £6.9m from government and £3.5m match from local providers and the private sector.

Education Business Partnership, JLR centre

The Education Business Partnership, JLR centre has secured almost £140K from partners to deliver the programme.

The results of any evaluation of the measures / schemes introduced.

Advanced Manufacturing & Engineering Hub phase 1

Stoke-on-Trent College, Burslem

- New Traineeships offered in fabrication & welding
- Updated course literature and website
- Expansion of links with Academy of engineer and construction forum
- Development of a water based spray painting programme for Bentley’s Apprenticeships using the new paint booth purchased through the capital grant
- Developed a bespoke traineeship programme for Weldability SiF to support its technical sales operation
- Delivered welding training provision for JCB using equipment purchased through the capital grant
- Training facilities used by other providers including Total people, Remit Axia Training
- Promoted AME to schools at the skill show showing renewable rigs equipment purchased through the capital grant
- Engaged schools in various taster sessions and conducted tours of new facilities and equipment to 15 schools
- Completed a number of case studies that featured in local press e.g. Bentley

South Staffordshire College, Tamworth

- Launched a campaign with the Tamworth Herald to promote the AME spokes at Tamworth
- Produced marketing leaflet and distributed to local employers
- Conducted a formal opening of both Tamworth spokes, opened by David Frost, SSLEP chair and Ben Adams, cabinet member for skills.
- Expanded links with employers and has commenced an Advanced Apprenticeship programme with Redrow Homes for 20 Apprentices with an additional 15 Apprentices to start in January 17.
- Created a new Pathway to Employment Apprenticeship and Traineeship (PEAT) programme designed for NEET young people.
- 71% increase in enrolments on to mechanical engineering 16-19 study programme at Tamworth Campus from 48 learners to 82.
- Offers a new higher Apprenticeship in Engineering
• Created a new motor vehicle intermediate apprenticeship and electrical installation apprenticeship (level 3).
Martec Training, Newcastle-under-Lyme

- Developed an introductory course in electric and hybrid cars with clear progression routes to IMI accredited programmes up to level 2 and delivered to 84 students to date
- Shared best practice in hybrid technology with Staffordshire providers e.g. South Staffordshire College
- Delivered presentation to local schools on electric and hybrid training provision and hosted a number of open evenings at its Newcastle-under-Lyme training Centre
- Promoted electric and hybrid training provision to existing employer base and new prospective employers
- Integrated tutorials on hybrid and electric cars in learner induction for all programmes

Education Business Partnership, JLR centre

During the first year of operation the small team at EBPC have produced a termly newsletter which has been used as a key tool within the marketing campaign and has generated a large number of enquiries.

Strong links have been established, with staff at JLR’s Engine Manufacturing Centre being very supportive of the EBPC. A number have assisted by actively engaging in the delivery and planning of sessions and supporting visits. A particular positive has been our links with Apprentices who support a large number of visits as additional tour guides.

Our whole day programmes and menu of sessions has proved popular and continues to develop. Feedback is excellent and has already translated into repeat bookings for next year. Our unique selling point is the ability to bring a students learning to life and provide examples in a real world context.

Our Women in Engineering Days have proved hugely popular both with students and with the Jaguar Land Rover staff that have supported us.

Working in partnership with Aston University we were able to deliver a whole day programme around careers and employer expectations as part of their My Birmingham, My Future series of events. This is a model we hope to build on.

January 2017