

# Skills, Employment & Education

HS2

2018–2020



Introduction

Britain’s new high-speed railway, HS2, will be the spine of the country’s low-carbon transport network and boost economic growth across our regions. New jobs are already being supported during the construction of HS2 and the pace will quicken as the railway extends to the North.

To make sure we maximise the opportunities offered by HS2, we need to address Britain’s skills shortage and equip the next generation with the knowledge they will need to thrive in the infrastructure sector. A quarter of our rail engineers are aged over 55 and are poised to retire in the next decade. We need to recruit and train the young people who will follow in their footsteps and play a vital role in Britain’s future economic growth. Where better to start than HS2 – the biggest infrastructure project in Europe?

Following several years of extensive preparatory works, we started the main construction of HS2’s Phase One route between the West Midlands and London in September 2020. The launch of the building programme – for the railway’s tunnels, bridges, viaducts and stations – coincided with the second anniversary of our Skills, Employment and Education (SEE) Strategy. The 2018 strategy set out how we will work with our supply chain to make sure skills and training are at the forefront of the programme and will benefit Britain’s wider infrastructure and engineering projects.

Skills, Employment and Education is one of our seven strategic objectives and it is fundamental to the success of HS2 and our legacy. The Government has recognised the contribution we will make to the COVID-19 economic recovery. The construction of Phase One is already creating thousands of new jobs – some 22,000 will be supported by work on the London-West Midlands route in the next few years – and we have passed the milestone of creating 400 apprenticeships. We are not stopping here, however, and plan to create at least 2,000 apprenticeships over the lifetime of the project.

We have continued to innovate in order to drive the skills agenda. New developments include the launch of our HS2 Job Brokerage, which will help local people and those from disadvantaged backgrounds and under-represented groups to access the new roles we are creating in our supply chain. The HS2 Job Brokerage will allow us to draw on a diverse pool of talent for the construction of the railway as the UK moves to a net zero-carbon economy.

This report showcases our achievements to date and looks to the future as Britain’s high-speed rail network becomes a reality.



Skills, Employment and Education: building a skills legacy

We’ve reached a **fifth** of our target for 2,000 apprenticeships



Over **50 STEM** workshops in primary schools through our Zoom Rail programme – engaging with nearly **2,000** pupils aged **7 to 11**



**STEM** workshops in secondary schools through our EPIC Engineers programme – **engaging** with over **5,000** students aged **11 to 14**

Supported **130 careers** activities in schools including mock interviews, assemblies and careers presentations, careers fairs and speed networking sessions



One to two-week work experience placements provided for young people, with **over 80** referred by HS2 partner charity Social Mobility Foundation



# Our strategy to boost skills and jobs with HS2

Our Skills, Employment and Education Strategy sets out how we deliver a comprehensive and practical programme to boost skills, training and employment – as well as our engagement with schools.

The strategy comprises four objectives, which support each other and govern our scope of work.



## Skills

Ensure we have the skills to deliver the HS2 programme, recruit and retain the right people, and leave a skills legacy for the transport infrastructure sector and the wider UK economy



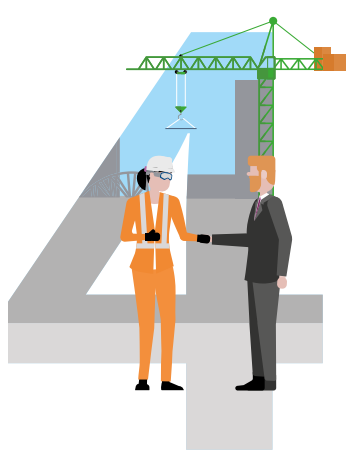
## Supply chain jobs & skills

Create sustainable skills, employment and education opportunities in our supply chain – for the construction and operation of the railway – through the use of procurement levers



## Education & STEM

Stimulate interest in STEM subjects to encourage more young people into careers in transport infrastructure, working with our supply chain and education providers



## Partnerships

Work in partnership with stakeholders and industry to maximise the economic and regeneration benefits of HS2 and realise our vision to be a ‘catalyst for growth’ across Britain

# HS2 Job Brokerage

Our SEE Strategy sets targets to ensure that local people – including people from disadvantaged backgrounds and under-represented groups – benefit from the thousands of job opportunities HS2 will create. HS2’s Job Brokerage platform will provide a single source of information that promotes job vacancies across the HS2 programme. Its launch follows the start of main works construction on Phase One of the railway, which is spearheading huge growth in job opportunities. The Job Brokerage model is designed to make it easier and more accessible for people to find opportunities to work on Britain’s new railway.

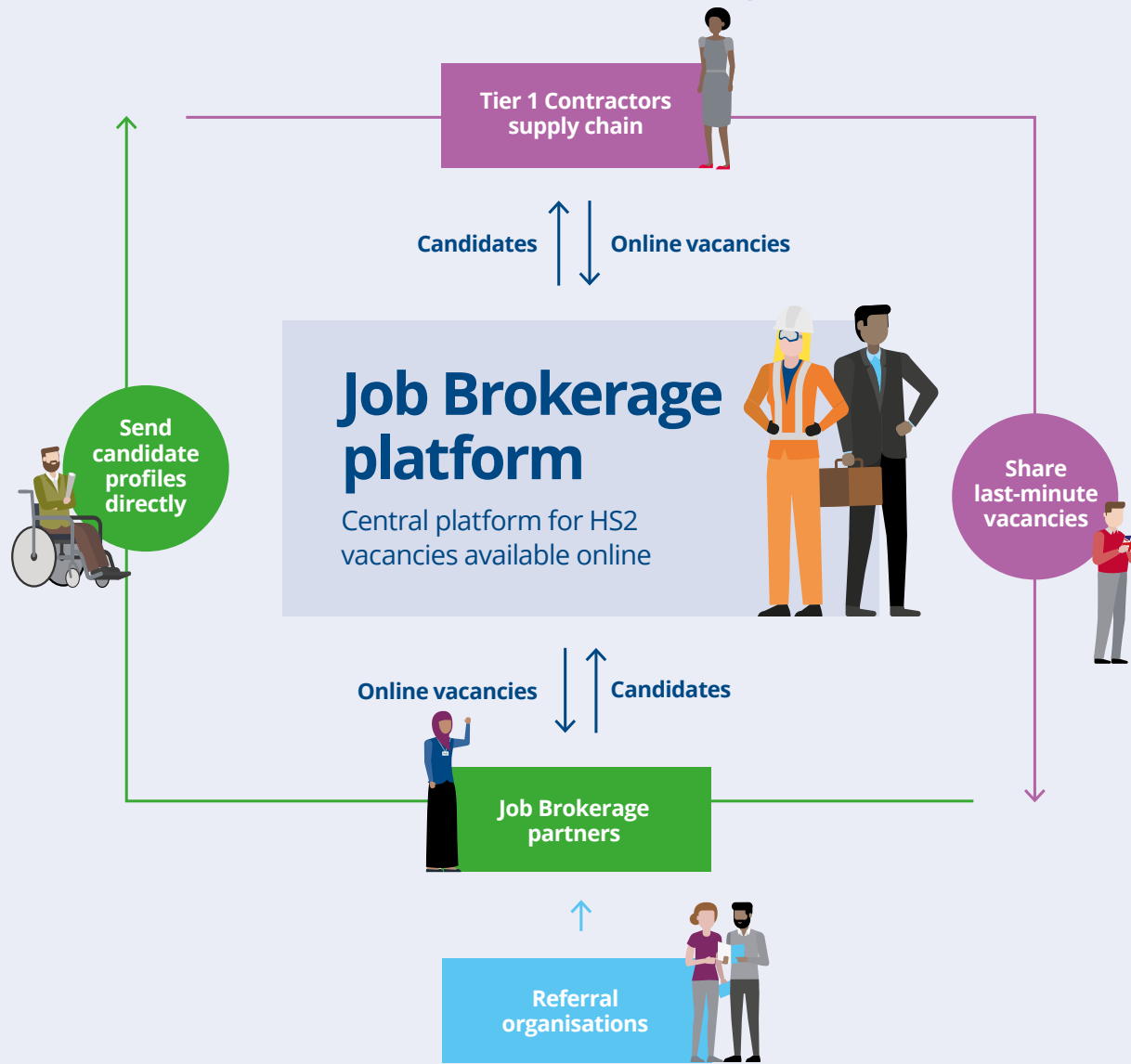
Supply chain vacancies will appear on the new Job Brokerage platform – an easy-to-search jobs board hosted on the HS2 website where job-seekers can find information on opportunities across the programme in one place: [hs2.org.uk](https://hs2.org.uk)

The success of the Job Brokerage model is linked to our work with Job Brokerage partners (such as local authorities) and referral organisations along the route of the new railway. Together we will assist candidates with their applications and support them as they begin work.

Our network of referral organisations features a broad range of publicly-funded groups and bodies including those working with:

- young people;
- Black, Asian and Minority Ethnic (BAME) people;
- women;
- refugees;
- workless people; and
- people with mental health conditions, underlying health conditions and disabilities.

## Here’s how the HS2 Job Brokerage works



Objective 1

We make sure we've got people with the skills to build HS2 and we're creating a skills legacy for the transport infrastructure sector and the wider UK economy

The start of construction is providing a major jobs boost along the route while our Future Talent Strategy has radically improved the design and delivery of our apprenticeship and graduate programmes. New labour and skills forecasting data will provide greater insights.



What we've achieved:

Future job numbers

Work is ramping up on HS2 during the main construction phase. Balfour Beatty VINCI joint venture (BBV JV) and its supply chain expect to create up to 7,000 skilled jobs over the next two years – making it one of the biggest recruiters in the West Midlands. Eiffage, Kier, Ferrovial and BAM Nuttall joint venture (EKFB JV) will recruit for more than 4,000 roles in the next two years, many based in Milton Keynes. HS2's Tier One construction partners in Greater London have confirmed they will collectively create more than 10,000 new jobs.

At HS2 Ltd, we are directly recruiting for 500 new roles, the majority based in Birmingham. The combined jobs boost is a clear sign of the key role HS2 is playing in supporting Britain's COVID-19 economic recovery.

A new round of forecasting work will be published in 2021. This will provide more information about the projected number, level and types of roles. It will also look at labour supply data to identify potential skills gaps and the interventions that may be needed.

Future talent strategy

We have changed our apprenticeship and graduate programmes at HS2 Ltd with major improvements for new starters and existing staff. Apprentices are studying for a wider range of apprenticeships – from health and safety to cyber security. Existing staff are choosing to upskill with leadership and management apprenticeships and we have increased our graduate intake in response to COVID-19. We are committed to the development of our people and provide a wide variety of opportunities to enhance skills, knowledge and behaviours, from e-learning and virtual classrooms to professional development and coaching.

My HS2: Emily Scott

From Birmingham Skills Show visitor to assistant procurement manager... what a difference an apprenticeship makes.

"I wasn't sure about what I wanted to do and had been thinking about university until I came across the HS2 stand and decided to apply for an apprenticeship.

"One year later, I returned to the Skills Show as a procurement and supply chain apprentice. I really enjoyed meeting other young people and sharing my personal experience. My highlight was offering a first-hand account of what it's like to join such a big project as an apprentice and how much I've been welcomed into my role. I loved being able to help others explore their career options – apprenticeships aren't just about tools and construction, there's a much bigger story behind HS2.

"I completed my apprenticeship in 2019, and, after six months as a procurement support officer, I was promoted to an assistant procurement manager role in the corporate procurement team – a position I didn't imagine I would have been in this time three years ago when I joined HS2."



Emily Scott  
HS2



Objective 2

We create sustainable skills, employment and education opportunities in our supply chain through the use of procurement levers

We work proactively to support the supply chain and facilitate the sharing of best practice in delivering apprenticeship targets and SEE requirements. Over 400 people have started apprenticeships and over 575 previously out-of-work people have found employment on the HS2 programme.



What we've achieved:

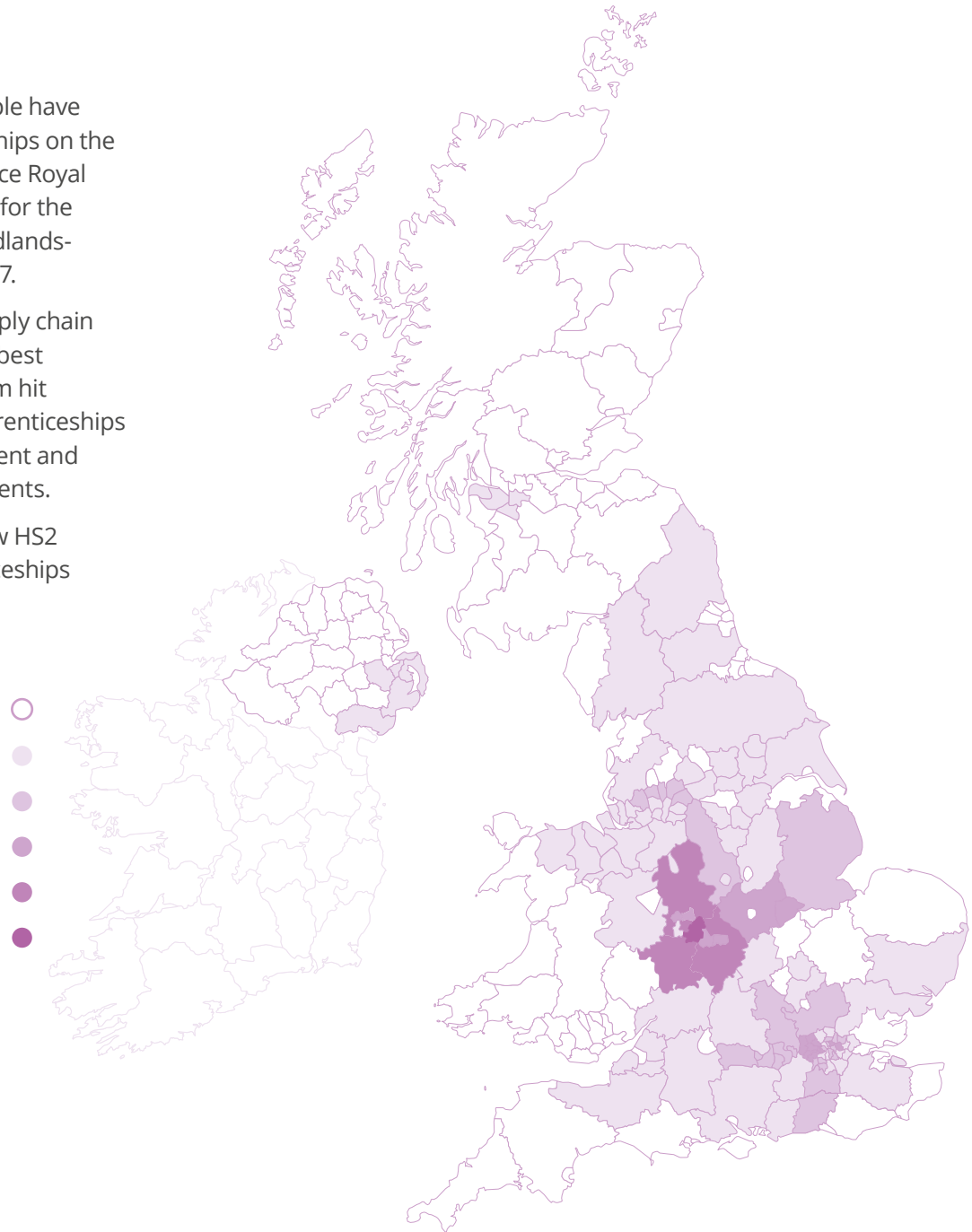
More than 400 people have started apprenticeships on the HS2 programme since Royal Assent was granted for the Phase One West Midlands-London route in 2017.

We support our supply chain partners and share best practice to help them hit targets for new apprenticeships and skills, employment and education requirements.

This map shows how HS2 is creating apprenticeships throughout the UK.

Key

- 0 apprentices
- 1-5 apprentices
- 6-10 apprentices
- 11-20 apprentices
- 21-49 apprentices
- 50+ apprentices



My HS2: Patrick Hogan

Patrick Hogan, aged 25, is an apprentice at Nottingham's Bridgeway Consulting, working on Britain's new high-speed railway.

"I studied geography at the University of Hull, and my apprenticeship gave me the chance to use my degree in the workplace. Mind you, I never thought that I'd be part of Europe's largest infrastructure project.

"My work is fascinating – I undertake topographical surveys that will inform the final design of the railway. As part of my apprenticeship I've received training in different areas like monitoring equipment operation, GPS, construction skills – even boat operation.

"Working on HS2 has helped me to develop technically and personally. I'm given the responsibility I need to progress in my career and the opportunity to use this experience in the years to come. Plus, as well as working and learning, I'm earning too.

"I've recently been promoted to engineering surveyor, where I now lead surveys on site. My apprenticeship has opened my eyes and led to fantastic opportunities that I would never have considered otherwise. As the HS2 project is so vast and covers multiple disciplines, there are opportunities for everyone."



Patrick Hogan  
Bridgeway Consulting

What we've achieved:

4%  
Main works construction contracts require 4% of workforce to be apprentices

i  
Information sharing and coordination on education events

Equality, Diversity and Inclusion/Skills, Employment and Education **supplier community forum** held three times a year and area-based forums led by contractors



8

Collaborative working on social mobility – 25 events across London and West Midlands for **National Apprenticeship Week 2020**, supported by HS2 supply chain and Strategic Transport Apprenticeship Taskforce supply chain



Free plant training places offered by EKFB thanks to funding from Construction Industry Training Board's Construction Skills Fund

MOLA



Launched MOLA Headland **archaeology trainee programme** with West Midlands Combined Authority Construction Gateway funding

thirty

SEE requirements included in more than 30 major contracts

Our SEE Strategy is changing lives

The main works construction for HS2 officially started in 2020, but Britain's high-speed railway is already opening up new opportunities and changing people's lives. Here, we share some of their stories.

Archaeology apprentice

**My HS2: Mick**  
Early in 2019, in conjunction with our West Midlands-based early works contractor LM JV and archaeology specialists MOLA Headland, we recruited 10 trainee archaeologists to work on our major sites in Birmingham. All of our recruits were new to the profession and received training. They now work as part of a highly-qualified team delivering the most extensive archaeological dig in Europe. Their ages range from 18 to 58, demonstrating that it is never too early or too late to train for a new career.

Mick, who is 58, joined MOLA Headland as a trainee archaeologist in November 2018. He had worked in the building trade for many years before becoming a publican, but health problems meant he found himself out of work for a number of years.

While he was unemployed, Mick followed up his interest in archaeology by taking part in a number of community digs and it was through his local group that he found out about the archaeology traineeship with HS2.

Mick said: "I didn't think I'd ever get the opportunity to explore a career in archaeology as I don't have an academic background in the subject.

"Being selected to do the archaeology traineeship and to be linked to a project as huge as HS2 is just amazing. I'm so pleased to be here."

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Mick  
MOLA Headland



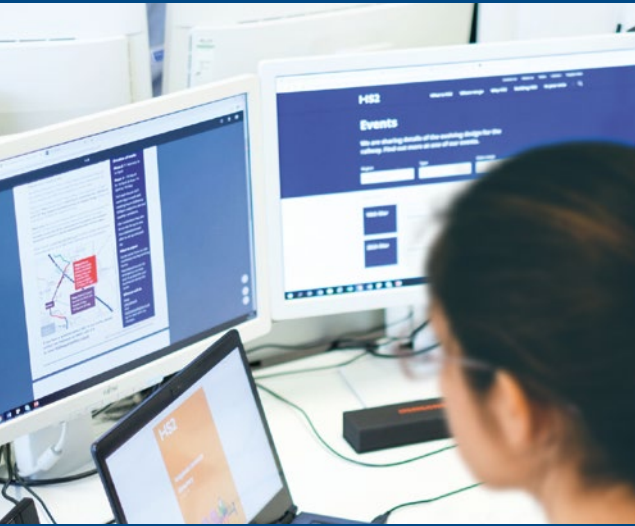


Supply chain apprentice

**My HS2: Charlotte Webster**  
Charlotte Webster, aged 20, from Southam, Warwickshire, is employed at Birmingham-based engineering firm WSP as an apprentice. She explains how the scheme is opening new career opportunities:

“I never thought when I entered the workplace that my first job would be part of Europe’s largest infrastructure project. But that’s the beauty of being an apprentice on HS2.

“My role at WSP sees me leading on the production of track drawings for HS2’s Phase 2b, which will go to Leeds and Manchester. This is just the sort of design-based role I wanted when I was studying for my BTEC, designing different elements and then watching everything come together. No two days are the same and I am getting experience across WSP’s multiple disciplines.



“There is an old-fashioned attitude that university is the only desirable route after school, but my apprentice experience is one that is giving me an edge over those who are following a more traditional route. Compared with my friends, I certainly feel like I have the best of both worlds. Not only am I working – and earning – alongside experienced staff and gaining job-specific skills, I’m also given time to study towards a qualification one day a week.

“As an apprentice, I am able to apply the concepts and technical knowledge learnt at university to help understand my work with greater clarity. Because I’m not based in the classroom, I’m being equipped with vital people skills, such as networking and communications, that are helping me develop into a more desirable candidate for the next stage in my career.

“Despite being relatively new to rail when I joined WSP, my apprenticeship has opened my eyes to opportunities that I would never have considered otherwise. I plan to become chartered in civil engineering and continue an exciting engineering career within rail – just one sector that a profession in engineering can take you.”



**As an apprentice, I am able to apply the concepts and technical knowledge learnt at university to help understand my work with greater clarity.”**



**Charlotte Webster**  
WSP

Buses4Homeless

We are proud to support the work of our early works contractor Costain/Skanska joint venture (CS JV), providing a temporary site close to Old Oak Common station for the Buses4Homeless (B4H) programme.

Social enterprise B4H aims to help homeless people with a 12-week programme, which provides accommodation, welfare facilities and wrap-around support for up to 12 people. The pilot programme is the first of its kind in the UK and is being trialled on the grounds of CS JV’s HS2 work site at Braitrim House in North Acton.

The B4H set-up is unique and consists of four fully refurbished London buses which have each been adapted to create a safe environment and a sense of community. One bus provides sleeping pods and toilet facilities; the second houses a fully equipped kitchen with appliances; the third provides well-being

facilities; and the fourth acts as a learning centre, complete with IT equipment. The four buses are parked in a quad-shape, creating space for a grassed community area in the middle.

Throughout the 12 weeks, the guests receive access to personal and social development programmes including mindfulness, nutritional development, life admin coaching (e.g. setting up bank accounts, managing finances), drug and alcohol support, as well as receiving vocational skills training and access to employment workshops. The programme is designed to help the men prepare for the long-term transition towards independent living, with support to find permanent housing and a job.

Frankie Jones, education and employment manager at CS JV, said: “Homelessness is a key issue in London, particularly in Camden and Westminster. As we will be here for a long time yet, it’s the perfect opportunity to be able to be involved with initiatives such as B4H as part of Empowering Communities, our 10-year legacy strategy, and see what a difference we can make.

“SCS has now taken over the support of B4H. As a result, out of the seven people on the B4H programme, five of them are now working full-time on the HS2 programme with our supply chain – and six of them have moved out into their own accommodation. This completes a full cycle of the programme for six people and we’ll be looking to welcome the next cohort.”



**It’s the perfect opportunity to be able to be involved with initiatives such as Buses4Homeless as part of Empowering Communities, our 10-year legacy strategy.”**



**Frankie Jones**  
CS JV

Objective 3

We inspire and support young people’s interest in science, technology, engineering and maths (STEM) subjects and encourage them into careers in the transport infrastructure sector

We have delivered more than 160 STEM workshops in schools along the route of HS2, engaging with over 8,500 students aged 7 to 14 since Royal Assent. We’ve also attended hundreds of careers events, developed educational resources and provided work experience opportunities for 160 young people.



Essential Skills and Virtual Work Experience

HS2 Ltd offers work experience placements to students every year, helping them to get valuable first-hand experience of the workplace. Students usually spend one week at HS2’s offices, where they are assigned a dedicated mentor and given the opportunity to work within the departments aligned to their career aspirations. To date, we have supported more than 160 students and provided placements in our engineering, environment and business support teams.

To ensure that students did not miss out due to COVID-19, we acted swiftly to adapt the programme and worked in partnership with Speakers for Schools and the Social Mobility Foundation to provide 37 students across the UK with week-long virtual work experience placements during June and July 2020.

We are members of the Skills Builder Partnership and we use the Essential Skills framework as a common approach to discussion and development of skills across our education programme.

The framework includes eight skills, each of which is broken down into 15 steps. This helps young people to understand what using a particular skill looks like and helps adults who are supporting them to frame conversations about how to develop that skill.



**My HS2: Jermaine**  
HS2 ‘superfan’ Jermaine, aged 13, from Leeds, spent a day at our headquarters at Snowhill, Birmingham and visited the new Curzon Street station site in the city.

Jermaine has been a passionate supporter of HS2 for several years and enjoyed meeting members of our team at last year’s Big Bang Fair in Birmingham.

During the Oakervee Review, Jermaine decided to write to Prime Minister Boris Johnson, setting out a powerful case for HS2, and how the railway was essential for the economies and opportunities of young people across the North.

Tom Walker, senior public response manager, said: “We were delighted to host Jermaine and his parents at Snowhill. He is a remarkable young man and no doubt a future CEO in the making.”

Richard Winter, education manager, added: “We first met Jermaine at the NEC’s Big Bang Fair in 2019. He travelled down from Leeds with his family because he was keen to visit our stand and spent a couple of hours talking to volunteers about their roles on the project. It was refreshing to meet a young person who was so enthusiastic and knowledgeable about HS2.”

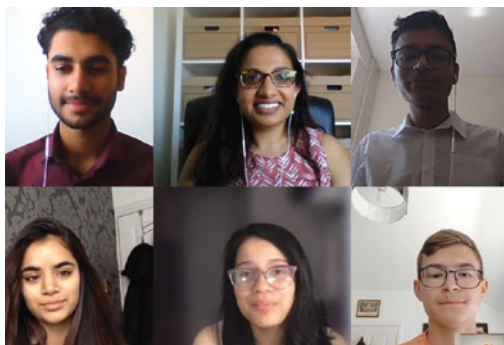


**Jermaine**  
Leeds



What we've achieved:

We've attended hundreds of careers events like Big Bang Fair, World Skills Live and Skills London to show young people the value of STEM subjects – and the exciting career opportunities they lead to in rail infrastructure.



What we've achieved:

**STEM workshops** in schools along the route, **engaging 8,500 students** aged 7 to 14 since Royal Assent



**STEM workshops** for nearly 2,000 young people aged 7 to 11 in primary schools through our **Zoom Rail programme**



**Education ambassadors** working with schools and young people



**Eleven** of our staff are **enterprise advisers** with the Careers & Enterprise Company, providing strategic support to schools in the development of their careers programmes



**Careers activities** in schools including mock interviews, assemblies, careers presentations, careers fairs and speed networking sessions



**110 workshops** in secondary schools for 11 to 14-year-olds through our **EPIC Engineers** programme



We are a Careers and Enterprise Company **Cornerstone Employer** in the Birmingham Careers Hub

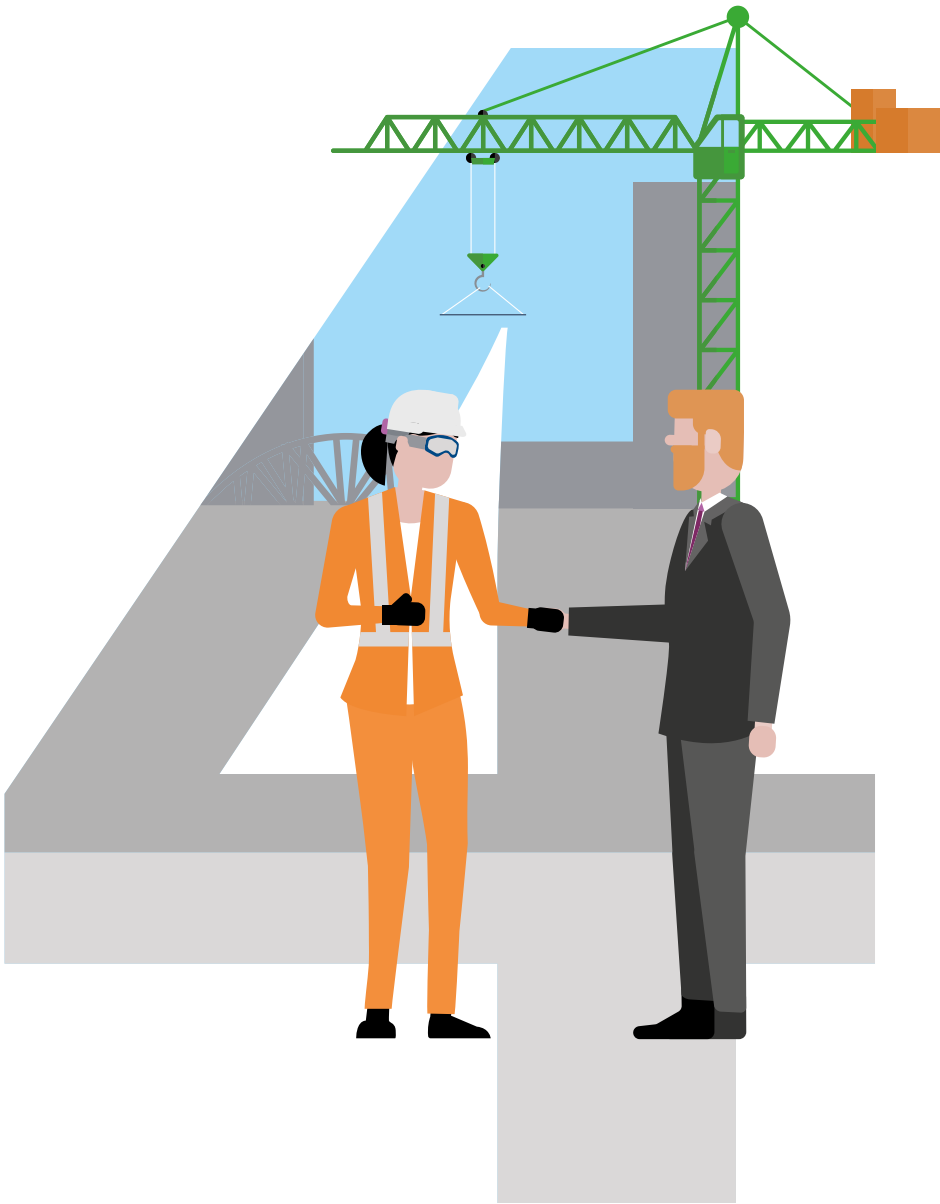


**Days** of school engagement activity delivered by our **supply chain**

Objective 4

We work in partnership with stakeholders and industry as they maximise economic and regeneration benefits along the route of HS2 and throughout the UK

The regeneration benefits of HS2 are integral to the Skills, Employment and Education agenda and this has been even more crucial in response to the COVID-19 pandemic. Working with stakeholders and the HS2 supply chain, we have run programmes, events and long-term collaborations to maximise the positive impact of HS2 for the UK economy.



What we've achieved:

The economic and regeneration benefits of HS2 are central to our SEE Strategy and our partnership working will be crucial as the UK recovers from the COVID-19 pandemic.

Delivering on our SEE Strategy objectives

We work with HS2 Growth Delivery Boards and other bodies to boost regional regeneration benefits with **National Apprenticeship Week** events.



We work with **stakeholder bodies** like the West London Alliance to link people from local communities to specialist services that can support them into HS2 jobs and apprenticeships.



Our infrastructure partners include:

- National Skills Academy for Rail (NSAR) Routes into Rail
- Strategic Transport Apprenticeship Taskforce (STAT) including STAT Social Mobility Working Group
- Apprenticeship Ambassador Network
- Engineering UK, and
- Construction Industry Training Board.

We ensure we **deliver undertakings and assurances** with a SEE focus – such as for the London Borough of Camden on the Euston Skills Centre and with Birmingham City Council at Washwood Heath.



Programmes like the **Mayor's Construction Academy, Strategic Transport Apprenticeship Taskforce pre-employment programme** (with work placements delivered by Align, Mace Dragados and WSP) and **Buckinghamshire Redundancy Taskforce** help our supply chain and economic development and regeneration organisations to meet SEE requirements.



My HS2: Rozie Harris

Rozie has always nurtured a passion for civil engineering and seized the opportunity to take part in the Women into Construction programme.

The initiative is designed for the unemployed, people looking for new opportunities and individuals from disadvantaged and under-represented groups. It aims to tackle the gender gap in the construction sector and ensure that local people benefit from the jobs and opportunities that our project is creating.

Rozie was one of 15 women who signed up for the six-week programme, gaining the necessary qualifications and embarking on work experience placements with us and the Tier 1 contractors in our supply chain. Thanks to the programme, Rozie is now a senior project engineer for HS2 enabling works contractor Fusion.

She said: "Being involved with Women into Construction has truly been a blessing. I've met the most wonderful group of women I could hope to meet.

"It is so refreshing to have professionals from such a large organisation like HS2 see women as valuable workers. Women into Construction has been an invaluable asset for me to get into my desired industry."



Rozie Harris  
Fusion



**We are committed to playing our part in Britain's COVID-19 economic recovery as our Skills, Employment and Education team builds on our strategy. We are determined to help equip the rail industry and the wider infrastructure sector for immediate and future challenges.**

More than 2,000 businesses are now working on HS2 and the programme has supported 10,000 jobs to date.

That figure will rise to 30,000 jobs at the peak of construction as we recruit, train and sustain jobs over the coming months and years for the people who design and build the railway, and offer exciting career opportunities for our diverse communities.

Our momentum means SEE is making a positive 'real-life' difference to individuals who are seeking work, a career change or new learning opportunities.

### **Our focus will now be on:**

- developing our offer to schools with careers advice and support on careers platforms and resources for schools;
- building our Inspire to Hire framework to ensure the diverse, young people that we engage with have the best opportunity to join our industry;
- working even more closely with our supply chain to increase opportunities for local, under-represented and diverse groups through our new Job Brokerage; and
- recognising great work by our supply chain and partners with new Inspiration Awards for SEE and EDI.

