

NELSIP

North East

Local Skills

Improvement

Plan



Annex C

Annex C - Background and Methodology

Introduction

This document explains how we built our evidence and the steps we took to develop the North East Local Skills Improvement Plan (NELSIP) following the guideline set by Skills England in November 2025. The document details the evidence base, the empirical methods and analytical process, the industry sector data and info collection process, the ERBs, FE Colleges and HEs Institutions and stakeholder engagement processes, and governance structures utilised to build the evidence base and formulate the NELSIP report for the period 2026-2029.

The NELSIP covers the whole North East Mayoral Strategic Authority (MSA) area, which was established in May 2024 and is led by Mayor Kim McGuinness, serving two million people, from the busy cities of Newcastle and Sunderland to the rural and coastal parts of County Durham and Northumberland. Crucially, this plan combines the work of the two previous LSIPs (the North East and the North of Tyne areas) into one single, stronger voice for the region, complementing the North East Local Growth Plan and the New Deal for North East Workers and UK Modern Industrial Strategy.

The integrated framework transitions the region towards a joint ownership model that ensure technical education, adult skills funding are directly responsive to employers' skills demand and emerging skills needs across 8 key priority sectors of North East region.

NELSIP Operating Principles

The methodology continues to be underpinned by the core operating principles established during the initial NELSIP implementation cycle:

- **Employer Led:** Engaging a broad range of employers including SMEs to define the workforce capability needed for regional growth.
- **Agile & Forward Looking:** Anticipating and responding to changes in demand from emerging technologies, Net Zero, and digitalisation.
- **Strategically Focussed:** Aligning and promoting technical education to prioritise areas of greatest regional impact.
- **Collaborative and Systemic:** Building a "coalition for change" between employers, providers, and stakeholders to create a supply of work-ready people.
- **Ambitious and Inclusive:** Providing residents with attractive, accessible learning routes to develop high-value skills.
- **Compelling:** Ensuring learning leads to "better jobs"—roles that offer a significant pay premium and drive the regional economy resilience and competitiveness.

Aligned to the UK's Modern Industrial Strategy and the Local Growth Plan, the NELSIP focus on all six key sectors identified in the Local Growth Plan, and two of the foundational economy priority sectors.



NELSIP – Outline Evidence base

The NELSIP is built upon a robust, evidence-based framework that aligns regional labour supply with the specific requirements of our eight strategic sectors. The development of the NELSIP followed a rigorous, additive process that prioritised the integration of existing knowledge to build on previous analysis undertaken in the previous LSIPs, Local Growth Plan and New Deal for North East Workers. This was supplemented by qualitative and quantitative intelligence inherited from Sector Skills Partnership and ERBs, ensuring that the insights of industry leaders remained at the heart of the analysis. HE Institutions and FE Colleges occupied also played a central role in the development of the NELSIP as strategic partners, primarily through Colleges for North East England and Universities for North East England as key strategic regional alliances. Working as system architects, they helped identify short and medium term skills demand and provided insight into current and future programmes aligned to the 5 NELSIP overarching priorities. Moving forward into the deployment phase they will play a central role in the development and delivery of programmes aligned to the NELSIP. By aligning these regional inputs with the latest intelligence from the Skills England dashboard, the NELSIP creates a unified narrative that bridges the gap between local employer needs and the evolving national and regional economic landscape.

Advanced Sector Mapping, Priority Occupations current and future demand – quantitative data

Following the Skills England NELSIP guideline the NELSIP is adopting the Standard Industrial Classification (SIC) codes to define the North East region sector demand, the NELSIP progressed to a granular sector mapping exercise fully aligned with the North East MSA Local Growth Plan. To overcome the limitations of traditional 2007 industrial classifications, we utilised Real-Time Industrial Classifications (RTICs) via the Data City platform. As a source already widely adopted by North East MSA and across industry, Data City allowed us to track over 400 emerging sectors and capture the active supply chain firms that standard data often overlooks. While we acknowledge the inherent challenges in modelling real-time data, this platform provides a high-fidelity starting point for mapping priority occupations, and their related short and medium term skills needs. This was the starting step to a following discussion and validation with ERBs representative of the sector and stakeholders involved in the process. This quantitative evidence, which is detailed in the appendix, served as the analytical starting point for the plan. The methodology employs three specific classification layers to capture the modern North East economy:

- **RSIC (Real-Time SIC Codes):** Data City's solution to the limitations of traditional SIC codes. It uses AI to assign the most relevant classification based on real-time activity, addressing the fact that the national SIC system (last updated in 2007) remains outdated and does not account for modern industries.
- **RTIC (Real-Time Industrial Classifications):** These go beyond SIC codes to track over 400 emerging sectors in real-time, such as AI, Data, and Quantum Technology. RTICs use website data, machine learning, and expert input to classify companies based on actual activities, providing deeper insights and more relevant classifications.
- **IS-8 Mapping:** Real-time mapping of the UK's Modern Industrial Strategy using modern, explainable classification methods that move beyond outdated SIC codes IS-8 specifically targeting (IS07) BioPharma (0701), Medical Technology (0702), and Core Life Sciences (0799).

The sector definition extends beyond traditional sector SIC codes to include businesses providing essential services that keep the specific sector running, even if their SIC business code does not explicitly reflect this. This inclusive approach has been considered the right way to forecast regional demand, for example for the Advanced Manufacturing including Electric Vehicle sector, and it is estimated to bring in about £2.3 billion in annual turnover to the region that would otherwise be excluded from strategic planning.

The definition of sector priority occupation and their related short-term and medium term skills needs was further strengthened cross mapping "Assessment of priority skills (published by DfE – GOV.UK - Assessment of priority skills accompanying table - <https://www.gov.uk/government/publications/assessment-of-priority-skills-to-2030>) with regional data sourced from Lightcast Data City (a recognised global industry standard for labour market analytics utilised by Skills England and North East MSA). This ensures a transparent link between national labour market intelligence and regional priority setting. Monthly job postings from January 2021 to December 2025 were averaged to mitigate the post-COVID spike and subsequent drop in demand and provide a reliable measure of observed labour demand. By applying a simple linear extrapolation to this series, we have established projected priority occupation demand by 2029.

The Lightcast data, supported informing discussions and the validation process with the Employer Representative Body (ERB) leads involved in the program, and industry leaders, this to ensure data signals aligned with the lived technical demand and emerging sector skills needs. In some instances ERBs were taking a more cautious approach due to current market dynamics, and those discussions have helped inform the NELSIP three strategic drivers, cross sectors cross cutting themes and NELSIP overarching priorities and recommendations.

The validation process with ERBs outline the below key points to consider:

- **Advert Aggregation & Under-Reporting:** While the 2021-2025 job posting data is reliable, there are exceptions for entry-level occupations like operators, bricklayers, and plasterers. In these cases, jobs may not be advertised online at all, or a single advert might cover multiple hires, meaning traditional data could under-report the true level of demand. Across relevant sectors, occupations showing the greatest current and future demand are Engineering positions (particularly Electrical Engineers), Welding trades and Tech-related roles.
- **The hidden Job market:** Vacancy data provides a useful indication of employer demand, but it does not capture the full extent of recruitment activity across the region. A significant proportion of vacancies, particularly entry-level jobs, supply chain roles, and niche technical occupations, are filled through informal channels such as word of mouth, internal referrals, and established employer networks. These trends mean that published vacancy data is likely to underrepresent total hiring activity, while more accurately highlighting vacancies that are harder to fill or require wider external advertising.
- **Different Job titles refer to the same skills set:** Certain clusters of roles require identical skill sets despite holding different job titles. These groupings have been captured in Annex D utilising Skills England's CASCOT web tool (Warwick).

Additionally for the Tech digital and AI sector specific we also made a detailed analysis and comparison of Lightcast and ONS data, as detailed in the following section.

Strategic Comparison ONS vs. Lightcast data -Modelled Projections vs. Empirical Realities for Tech, Digital, AI sector

A critical aspect of the current strategic review is the triangulation of labour demand estimates via an extensive ERB validation process. In this process, ERB reported significant differences between modelled projections (such as those from Lightcast) and empirical observations of actual hiring behaviour derived from ONS Textkernel data. The ONS Textkernel dataset provides monthly counts of newly advertised job postings by

occupation and region, providing a direct empirical measure of observed labour demand, independent of modelled occupational inference or sector classification.

The validation process with sector ERB revealed that Lightcast anticipates stronger structural growth in analytical and data-related occupations than is implied by the extrapolation of observed hiring behaviour using ONS data. Specifically, Lightcast was identified as significantly overestimating demand for Programmers, IT specialist managers, Data analysts, and Database professionals relative to the ONS baseline. Conversely, across core software and technical delivery occupations, particularly programmers and software development professionals (SOC 2134), IT operations technicians (SOC 3132), and IT user support technicians (SOC 3132), ONS Textkernel data indicates higher baseline levels of demand than Lightcast estimates.

This suggests that Lightcast may understate the scale of current regional hiring intensity in certain implementation-focused technical roles in the North East. The largest relative Lightcast underestimations were observed in engineering technician roles and scientific and broadcast engineering roles. For example, in engineering technicians (SOC 3113), the ONS baseline average (78.9) exceeds the Lightcast average (75.4), a discrepancy that could have implications for regional technician training pipelines.

The triangulation confirms that Lightcast provides a broadly credible directional signal of occupational demand, particularly in identifying the relative importance of different occupational categories but underscores the importance of validating modelled projections against independent empirical data sources. The table below provide a comparative Analysis of Labour Demand for Digital Occupations in the North East.

SOC 2020	Occupation Title	ONS Baseline Avg (21-25)	ONS 2029 Linear Projection	Lightcast Avg Baseline (21-25)	Lightcast 2029 Projection	Difference (LC-ONS Baseline)
2134	Programmers & Software Devs	160.6	98.2	171.5	381.8	+10.9
2133	IT Specialist Managers	87.5	72.1	330.3	130.1	+242.8
3544	Data Analysts	52.8	48.3	115.6	57.2	+62.8
2123	Database Professionals	38.4	62.7	93.4	165.0	+55.0
2135	IT Business Analysts & Architects	42.6	38.9	95.2	55.2	+52.6
3132	IT Operations Technicians	53.7	49.2	84.6	44.8	+30.9
2132	IT User Support Technicians	41.4	36.1	70.2	38.0	+28.8
2129	IT Professionals n.e.c.	31.9	44.8	76.4	205.0	+44.5
5242	Telecommunications Engineers	13.6	14.8	19.2	21.7	+5.6
3113	Engineering Technicians	78.9	81.2	75.4	76.3	-3.5

The use of Lightcast and ONS Textkernel data provides two different but necessary perspectives on the regional labour market. Lightcast forward-looking modelling is essential for anticipating structural shifts driven by national policy and technological breakthroughs, such as the emergence of the "Swiss army knife" technologist. However, the ONS Textkernel dataset provides the empirical "ground truth" of what firms are doing today. The overestimation of certain roles by Lightcast, such as Business Analyst (Difference: +52.6) and IT Specialist Managers (+242.8), may reflect a "structural optimism" within the model that anticipates a faster pace of digital transformation than regional firms are currently achieving. Conversely, the higher ONS baseline for IT Operations Technicians and IT User Support Technicians highlights the persistent demand for the "technical doers" who keep the current economy running. The Lightcast provides a directional signal, identifying which occupations are growing in relative importance. However, for short-term workforce planning the ONS empirical baseline serves as a more reliable anchor. This balanced approach allows the region to build a "resilient and responsive" supply of skills that addresses both current vacancies and future growth opportunities.

Area of Analysis	Lightcast Projection Strength	ONS Empirical Baseline Strength
Emerging Roles	High (Captures structural shifts)	Low (Lagging indicator for new roles)
Core Delivery Roles	Moderate (May overstate growth)	High (Captures current hiring intensity)
Technician Roles	Low (Often understates demand)	High (Captures physical-digital needs)
Analytical Roles	High (Assumes rapid AI adoption)	Moderate (Reflects current adoption levels)

Employer Validation and Industry Intelligence

The data and sector intelligence were subjected to a rigorous, ongoing validation process involving extensive stakeholder engagement to ensure the demand fully matched with regional North East employers' demand. The validation process outcome indicates that employers are more conservative than our initial Lightcast models suggested. While workforce planning is a critical priority, many organisations find difficult to align their current talent with future needs, even if it is a critical element to build regional resilience. The consultations were critical for refining demand signals for roles that are often under-represented in traditional data, such as entry-level operators and bricklayers. Furthermore, this

dialogue allowed us to validate an acute regional need for specialised expertise and confirmed the accelerating transition towards emerging technical skills. By reconciling algorithmic projections with the "Assessment of Priority Skills" data and lived industry experience, the NELSIP provides a planning base that is both statistically significant and operationally verified.

The stakeholder engagement activity involved over 1,200 touchpoints. This inclusive and iterative approach to stakeholder engagement is ongoing, and includes:

- Sector Skills Groups: Engaging sector focused businesses any size across the NELSIP sectors.
- Skills Sprints: Workshops with partners to identify specific barriers and discuss current/future skills needs, system changes required.
- ERBs and employers Insights: Online surveys and consultations with national and regional employer bodies, sector-specific forums, and structured one-to-one interviews.
- Skills providers: Engaging cross-sector partners involved in the deployment of adult skills provision across the region, including Further Education Colleges, Higher Education Institutions and Independent Training Providers.
- Broader stakeholders: Other key organisations within the skills eco-system, including local councils, RTO's and key Government agencies such as DWP.

Multiple methods of data collection were used and combined to maximise access to employer input for each of the five sectors.

Type	Adv. Manuf.	Constr.	Creative Ind.	Defence Security Space	Life Science, Pharma Process	Offshore Wind Energy Trans.	Adult Social Care	Tech, Digital AI	Provider	Cross Sector
Meeting	14	10	3	1	9	9	1	4	42	37
Other	118					18		40	17	150
Struct. Interview	10	9	8	12	6	19	9	7	8	4
Survey	7	1		2	9	8		13		
Workshop	54	30			30	27	26	26	113	329
Totals	203	50	11	15	54	81	36	90	180	520
									Total	1240

Six areas of enquiry were used to provide a consistent approach to data collection across the approaches: Workforce Composition & Labour Market Conditions, Recruitment Challenges & Dynamics, Skills Gaps & Workforce Capability, Training Provision & Development, Engagement with Education & Pipelines, and Future Skills Demand & Sector Outlook.

Focus	Areas Covered
Workforce Composition & Labour Market Conditions	Analysis of workforce organisation structure, attrition rates, workforce demographics and industry challenges.
Recruitment Challenges & Dynamics	Identification of "hard-to-fill" roles and Shorth Skills Vacancy, turnover trends, and the impact of geography and international recruitment on the labour pool.
Skills Gaps & Workforce Capability	Distinction between technical skill shortages and gaps in "soft skills" (e.g., communication, resilience) including digital literacy.
Training Provision & Development	Evaluation of internal training models, utilisation of the Apprenticeship Levy, and systemic barriers such as curriculum misalignment or lean production pressures.
Engagement with Education & Pipelines	Assessment of current partnerships with Schools, FE, and HE, including the effectiveness of T Levels, work experience, and industry-led outreach.
Future Skills Demand & Sector Outlook	Anticipated needs driven by strategic shifts (e.g., AI, Net Zero) and identification of emerging disciplines and leadership pipelines through 2029.

The approach provided.

- a contextual understanding of the employers' skills needs, now and in the future.
- an understanding of the extent of employer workforce planning activity.
- understanding the organisation's experiences in addressing their skill needs.
- an opportunity for a dialogue to understand underlying systemic issues.

The NELSIP Employer Skills Survey (NEESS)

A major pillar of our evidence comes from the NEESS survey, which captured responses from local employers across the region. The survey was designed to understand what stops businesses from training staff and what technical skills they will need in the future.

The survey asked employers specific questions, including:

- Current Gaps: What proportion of your vacancies are hard to fill because of a shortage of *people* versus a shortage of *technical skills*?
- Business Impact: What happens when you cannot find skills (e.g. higher operating costs, delayed products, or losing business to

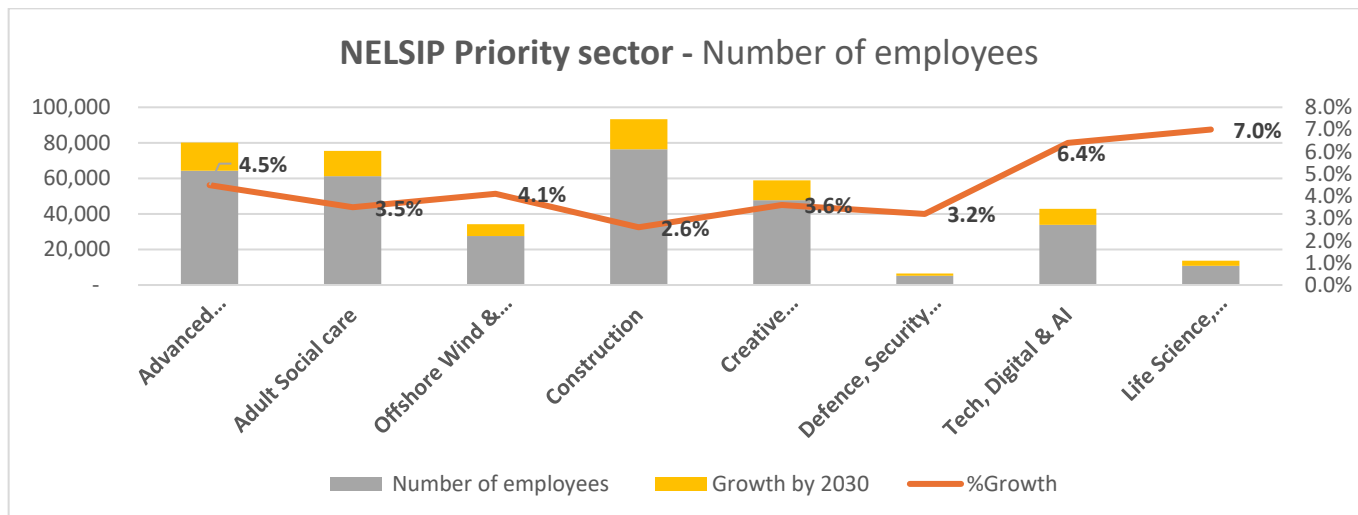
competitors)?

- Future Drivers: To what extent are AI, Net Zero, and regulatory changes driving your 2-5 year skills needs?
- Planning Approach: Do you have a proactive skills plan, or do you fill vacancies opportunistically?
- Barriers to Training: What stops you from doing more training (e.g. lack of budget, unable to release staff, or lack of local provision)?
- Work Readiness: Do your preferred candidates typically lack soft skills or "work-readiness" (like time management and communication)?

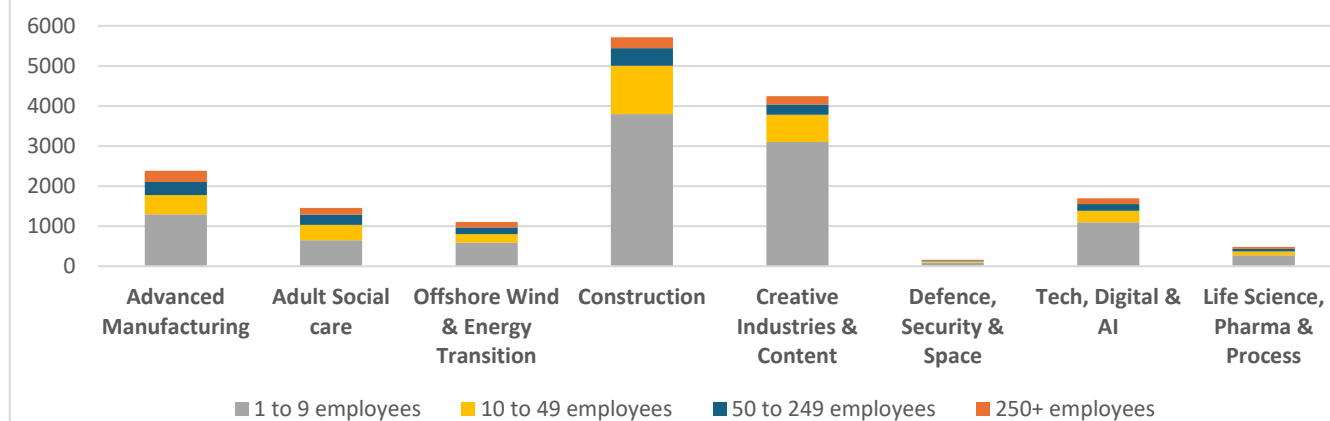
As outcome of the process, we had been able also to collect additional data about the sector demographic and workforce structure.

	Advanced Manufacturing	Adult Social care	Offshore Wind & Energy Transition	Construction	Creative Industries & Content	Defence, Security & Space	Tech, Digital & AI	Life Science, Pharma & Process
Number of employers	2384	1455	1105	5715	4240	158	1679	482
Employer size: (by employees)								
1 to 9	54.50%	44.50%	53.60%	66.50%	73.10%	55.10%	65.50%	57.2%
10 to 49	20.10%	26.30%	19.10%	21%	16.10%	19.60%	16.70%	19.1%
50 to 249	13.40%	17.70%	14.60%	7.60%	6%	16.50%	10.90%	13.3%
250+	11.70%	11.50%	12.80%	4.80%	4.90%	8.90%	9.40%	10.4%
Number of employees	64380	61196	27549	76331	47745	5284	33808	10743
Employee age:								
16-24		16-25: 7%	9.30%	23%	6.2%	16-21 - 5.5%	5.70%	
25-34		26-39: 33%	19.70%	26%	29.6%	22-29 - 20%	29.60%	up to 30 - 27%
35-44		40-54: 30%	20.70%	24%	24.9%	30-39 - 23%	25.40%	30 to 50 - 47%
45-54		55+: 29%	26.10%	14%	22.8%	40-49 - 20%	24.40%	50+ - 26%
55-64			19.95%	10.50%	12.0%	50-59 - 23%	12.30%	
65+			8.25%	3.50%	4.5%	60+ - 8%	2.50%	

	Advanced Manufacturing	Adult Social care	Offshore Wind & Energy Transition	Construction	Creative Industries & Content	Defence, Security & Space	Tech, Digital & AI	Life Science, Pharma & Process
Number of employees	64,380	61,196	27,549	76,331	47,745	5,284	33,808	10,743
Sector size in 2030 (employees)	80,229	75,532	34,200	93,393	58,987	6,503	42,897	13,708
Growth by 2030	15,849	14,336	6,651	17,062	11,242	1,219	9,089	2,965
Sector estimated growth per year (employees)	4.5%	3.5%	4.1%	2.6%	3.6%	3.2%	6.4%	7.0%



NELSIP Priority sectors - business fragmentation



Refining the Demand Signal: Labour Shortages vs. Skill Shortages

The methodology of the previous NELSIP recognised that not all "hard to fill" jobs result from a lack of technical expertise or scarce skills, but that some arise from unappealing employment propositions and competition between employers for low-skilled workers in a tightening labour market. The scope of this NELSIP requires a broader consideration of "hard-to-fill" jobs. It does this by identifying the foundation and employability skills important to these entry-level roles, as well as identifying emerging requirements, including increased digital literacy. The NELSIP does not seek to address specific structural recruitment challenges associated with these entry-level roles but does invite employers and Sector Skills Partners to consider outreach activity and positive assistance measures that can attract a more diverse workforce and enable increased inclusion. A focus on scarce technical skills is still important to employers though and is reflected in NELSIP. Employer Skills Surveys 2024 revealed a regional skill-shortage vacancy density of 37%, significantly higher than the national rate, driven by applicants lack the required technical skills, qualifications, or experience. This shortage is most severe in essential growth sectors: Construction records a shortage density of 45%, while Advanced Manufacturing, which drives £4.5 billion in annual exports, faces a 34% shortage density, directly impeding the adoption of Industry 4.0 technologies.

Academic Year 2024/25 apprenticeship starts by route in the NELSIP region – data intelligence NELSIP Key priority sectors current

Routes	Standard/framework	ST Code	Level	NE Starts
Construction and building environment	Construction Plant Operative	ST0736	2	200
	Carpentry and Joinery	ST0264	2	180
	Bricklayer	ST0095	2	120
	Roofer	ST0270	2	70
	Scaffolder	ST0265	2	60
	Groundworker	ST0513	2	50
	Floor layer - Textile and Resilient	ST0262	2	30
	Painter and Decorator	ST0295	2	30
	Plasterer	ST0096	2	30
	Property Maintenance Operative	ST0171	2	30
	Interior Systems Installer	ST0388	2	20
	Commercial Thermal Insulation Operative	ST0591	2	10
	Highways Maintenance Skilled Operative	ST0053	2	10
	Plumbing and Domestic Heating Technician	ST0062	3	140
	Maintenance and Operations Engineering Technician	ST0154	3	110
	Craft Carpentry and Joinery	ST0263	3	70
	Civil Engineering Technician	ST0091	3	20
	Construction Support Technician	ST0960	3	20
	Safety, Health and Environment Technician	ST0550	3	20
	Building Services Engineering Craftsperson	ST0058	3	10
	Surveying Technician	ST0332	3	10

	Civil Engineering Senior Technician	ST0046	4	20
	Construction Design and Build Technician	ST0043	4	20
	Construction Quantity Surveying Technician	ST0049	4	20
	Building Services Engineering Senior Technician	ST0041	4	10
	Construction Site Supervisor	ST0048	4	10
	Chartered Surveyor (Degree)	ST0331	6	90
	Civil Engineer (Degree)	ST0417	6	30
	Construction Quantity Surveyor (Degree)	ST0045	6	20
	Building Control Surveyor (Integrated Degree)	ST0652	6	10
	Building Services Engineer (Degree)	ST0041	6	10
	Construction Site Management (Degree)	ST0047	6	10
	Architect (Integrated Degree)	ST0343	7	10
	Adjustment	Small Volume Suppressed Standards		30
	TOTAL			1,530
Routes	Standard/framework	ST Code	Level	NE Starts
Digital	Data Technician	ST0795	3	220
	Information Communications Technician	ST0973	3	130
	Digital Support Technician	ST0120	3	20
	IT Technical Salesperson	ST0115	3	10
	Software Development Technician	ST0128	3	10
	Data Analyst	ST0163	4	170
	Business Analyst	ST0117	4	70
	Cyber Security Technologist (2021)	ST0124	4	30
	Network Engineer	ST0127	4	30
	Software Developer	ST0116	4	30
	DevOps Engineer	ST0825	4	10
	Digital Product Manager	ST1318	4	10
	Data Engineer	ST0774	5	20
	Digital Learning Designer	ST0969	5	10
	Digital and Technology Solutions Professional	ST0119	6	90
	Data Scientist (Integrated Degree)	ST0585	6	10
	Digital & Tech Solutions Specialist (Integrated Degree)	ST0482	7	60
	Artificial Intelligence (AI) Data Specialist	ST0763	7	20
	TOTAL			950
Routes	Standard/framework	ST Code	Level	NE Starts
Engineering and Manufacturing	Lean Manufacturing Operative	ST0420	2	100
	Urban Driver	ST0926	2	100
	Autocare Technician	ST0070	2	70
	Passenger Transport Operative	ST0491	2	40
	Engineering Operative	ST0537	2	30
	Large Goods Vehicle (LGV) Driver C + E	ST0257	2	30
	Welder	ST0349	2	20
	Baker	ST0188	2	10
	Furniture Making Operative	ST0496	2	10
	Furniture Manufacturer	ST0497	2	10
	Port Operative	ST0233	2	10
	Science Manufacturing Process Operative	ST0537	2	10
	Surface Finisher	ST0460	2	10

	Wood Product Manufacturing Operative	ST0976	2	10
	Engineering Technician	ST0310	3	310
	Installation and Maintenance Electrician	ST0152	3	260
	Motor Vehicle Service & Maint. Tech (Light Vehicle)	ST0120	3	120
	Engineering Fitter	ST0090	3	90
	Machining Technician	ST0025	3	90
	Metal Fabricator	ST0607	3	80
	Plate Welder	ST0617	3	50
	Fire Emergency and Security Systems Technician	ST0189	3	40
	Heavy Vehicle Service and Maintenance Technician	ST0068	3	40
	Train Driver	ST0067	3	40
	Bus and Coach Engineering Technician	ST0030	3	30
	Engineering Design Technician	ST0041	3	30
	Gas Engineering Operative	ST0155	3	30
	Improvement Technician	ST0193	3	30
	Refrigeration Air Con & Heat Pump Engineering Tech	ST0150	3	30
	Vehicle Damage Paint Technician	ST0405	3	20
	Commercial Catering Equipment Technician	ST0575	3	10
	Engineering and Manufacturing Support Technician	ST0457	3	10
	Gas Network Craftsperson	ST0156	3	10
	Laboratory Technician	ST0248	3	10
	Lift and Escalator Engineering	ST0252	3	10
	Mechatronics Maintenance Technician	ST0025	3	10
	Non-Destructive Technologies Technician	ST0288	3	10
	Power Industry Overhead Linesperson	ST1330	3	10
	Rail Engineering Technician	ST0315	3	10
	Science Manufacturing Technician 2014	ST0250	3	10
	Science Manufacturing Technician 2023	ST1406	3	10
	Vehicle Damage Panel Technician	ST0406	3	10
	Water Industry Network Technician	ST0161	3	10
	Water Industry Treatment Process Technician	ST0162	3	10
	Improvement Practitioner	ST0192	4	50
	Engineering Manufacturing Technician	ST0040	4	40
	Electrical Power Networks Engineer	ST0475	4	20
	BEMS Controls Engineer	ST0636	4	10
	Electrical and Electronic Engineer (Degree)	ST0151	6	20
	Manufacturing Engineer (Degree)	ST0025	6	20
	Nuclear Scientist & Nuclear Engineer (Degree)	ST0289	6	10
	Product Design and Development Engineer (Degree)	ST0027	6	10
	Scientist	ST0590	6	10
	Total			2,080
Routes	Standard/framework	ST Code	Level	NE Starts
Business Administration and Law	Customer Service Practitioner	ST0072	2	350
	Accounts or Finance Assistant	ST0607	2	80
	Facilities Services Operative	ST0172	2	10
	Business Administrator	ST0070	3	660
	Team Leader	ST0384	3	510
	Assistant Accountant	ST0608	3	140
	HR Support	ST0239	3	90
	Multi-Channel Marketer	ST1031	3	50
	Payroll Administrator	ST0073	3	30

	Financial Services Administrator	ST0177	3	20
	Paralegal	ST0245	3	20
	Procurement and Supply Assistant	ST0312	3	20
	Senior Financial Services Customer Adviser	ST0185	3	20
	Bid and Proposal Co-Ordinator	ST0013	3	10
	Fundraiser	ST0558	3	10
	Insurance Practitioner	ST0179	3	10
	Leisure Duty Manager	ST0505	3	10
	Recruiter	ST0242	3	10
	Associate Project Manager	ST0310	4	100
	Professional Accounting Technician	ST0605	4	100
	Procurement and Supply Chain Practitioner	ST0313	4	40
	School Business Professional	ST0235	4	40
	Sales Executive	ST0544	4	30
	Marketing Executive	ST0596	4	20
	Corp. Responsibility & Sustainability Practitioner	ST0920	4	10
	Data Protection & Info Governance Practitioner	ST0965	4	10
	Policy Officer	ST0942	4	10
	Quality Practitioner	ST0810	4	10
	Operations Manager	ST0385	5	440
	Coaching Professional	ST0809	5	90
	People Professional	ST0238	5	80
	Improvement Specialist	ST0192	5	10
	Chartered Manager (Degree)	ST0272	6	140
	Project Manager (Integrated Degree)	ST0411	6	20
	Career Development Professional	ST0691	6	10
	Digital Marketer (Integrated Degree)	ST0122	6	10
	Senior Leader	ST0480	7	380
	Accountancy or Taxation Professional	ST0007	7	260
	Solicitor	ST0246	7	60
	Senior People Professional	ST0237	7	50
	Systems Thinking Practitioner	ST0669	7	10
	TOTAL			3,980
Routes	Standard/framework	ST Code	Level	NE Starts
Health, Care & Public Services	Adult Care Worker	ST0005	2	260
	Pharmacy Services Assistant	ST0299	2	110
	Early Years Practitioner	ST0888	2	80
	Lead Traffic Management Operative	ST0816	2	80
	Healthcare Support Worker	ST0216	2	50
	Healthcare Science Assistant	ST0218	2	10
	Housing and Property Management Assistant	ST0233	2	10
	Early Years Educator	ST0135	3	500
	Lead Adult Care Worker	ST0006	3	430
	Dental Nurse (GDC 2023)	ST1431	3	140
	Senior Healthcare Support Worker	ST0217	3	110
	Pharmacy Technician (Integrated)	ST0300	3	100
	Ambulance Support Worker (Emergency, Urgent and Non-Urgent)	ST0489	3	80
	Dental Nurse (Integrated)	ST0113	3	60
	Operational Firefighter	ST0208	3	60
	Housing and Property Management	ST0234	3	30
	Emergency Contact Handler	ST0472	3	20
	Community Fire Safety Advisor	ST0207	3	10
	Community Health and Wellbeing Worker	ST0948	3	10

	Public Service Operational Delivery Officer	ST0244	3	10
	Youth Support Worker	ST0979	3	10
	Children, Young People and Families Practitioner	ST0052	4	310
	Lead Practitioner in Adult Care	ST0007	4	70
	Senior Housing and Property Management	ST0235	4	30
	Counter Fraud Investigator	ST0613	4	20
	Healthcare Science Associate	ST0219	4	10
	Intelligence Analyst	ST0246	4	10
	Oral Health Practitioner	ST0383	4	10
	Police Community Support Officer	ST0303	4	10
	Regulatory Compliance Officer	ST0427	4	10
	Leader in Adult Care	ST0008	5	140
	Nursing Associate (NMC 2018)	ST0827	5	140
	Children, Young People and Families Manager	ST0053	5	70
	Early Years Lead Practitioner	ST0869	5	40
	Assistant Practitioner (Health)	ST0215	5	10
	Police Constable (Integrated Degree)	ST0304	6	120
	Registered Nurse Degree (NMC 2018)	ST0781	6	110
	Social Worker (Integrated Degree)	ST0510	6	40
	Enhanced Clinical Practitioner	ST0895	6	20
	Diagnostic Radiographer	ST0619	6	10
	Dispensing Optician	ST0774	6	10
	Healthcare Science Practitioner (Integrated Degree)	ST0220	6	10
	Non-Home Office Police Officer	ST0304	6	10
	Occupational Therapist	ST0517	6	10
	Operating Department Practitioner	ST0583	6	10
	Paramedic	ST0518	6	10
	Youth Worker	ST0980	6	10
	Advanced Clinical Practitioner (Integrated Degree)	ST0539	7	50
	Community Nurse Specialist Practitioner (NMC 2022)	ST1310	7	20
	Specialist Community Public Health Nurse (NMC 2022)	ST1311	7	10
	Adjustment	Small Volume Suppressed Standards		50
Total				3,550
Routes	Standard/framework	ST Code	Level	NE Starts
Retail and Commercial enterprise	Hairdressing Professional	ST0213	2	140
	Retailer	ST0327	2	70
	Supply Chain Warehouse Operative	ST0259	2	60
	Production Chef	ST0231	2	50
	Commis Chef	ST0228	2	40
	Hospitality Team Member	ST0233	2	40
	Optical Assistant 2022	ST0297	2	30
	Food and Beverage Team Member	ST0273	2	20
	Trade Supplier	ST0301	2	20
	Beauty Therapist	ST0215	2	10
	Butcher	ST0078	2	10
	Express Delivery Operative	ST0103	2	10
	Junior Estate Agent	ST0504	2	10
	Hospitality Supervisor	ST0230	3	80
	Customer Service Specialist	ST0071	3	60

	Retail Team Leader	ST0326	3	50	
	Advanced and Creative Hair Professional	ST0214	3	30	
	Senior Production Chef	ST0232	3	30	
	Transport and Warehouse Operations Supervisor	ST0260	3	30	
	Chef De Parties	ST0227	3	10	
	Facilities Management Supervisor	ST0173	3	10	
	Funeral Director	ST0567	3	10	
	Supply Chain Practitioner (FMCG)	ST0258	3	10	
	Hospitality Manager	ST0229	4	40	
	Retail Manager	ST0325	4	20	
	Facilities Manager	ST0174	4	10	
	Supply Chain Leadership Professional (Integrated Degree)	ST0261	6	10	
TOTAL				910	
Routes	Standard/framework	ST Code	Level	NE Starts	
Education and Training	Teaching Assistant	ST0457	3	160	
	Learning and Development Practitioner	ST0563	3	10	
	Education Technician	ST0600	3	0	
	Learning and Skills Assessor	ST0147	3	0	
	Learning Mentor	ST0148	3	0	
	Learning and Skills Mentor	ST0148	4	10	
	Assessor Coach	ST0146	4	0	
	Learning and Skills Teacher	ST0149	5	50	
	Specialist Teaching Assistant	ST1030	5	40	
	L&D Consultant Business Partner	ST0562	5	30	
	Teacher	ST0484	6	30	
	Academic Professional	ST0477	7	0	
	TOTAL				330
	Routes	Standard/framework	ST Code	Level	NE Starts
Agriculture, Horticulture and Animal Care	Equine Groom	ST0166	2	30	
	General Farm Worker	ST0638	2	20	
	Golf Greenkeeper	ST0208	2	20	
	Horticulture or Landscape Construction Operative	ST0225	2	20	
	Animal Care and Welfare Assistant	ST0397	2	10	
	Arborist	ST0223	2	10	
	Countryside Worker	ST0322	2	10	
	Dog Groomer	ST0398	2	10	
	Land-Based Service Engineer	ST0242	2	10	
	Waste Resource Operative	ST0305	2	10	
	Veterinary Nurse	ST0313	3	20	
	Land-Based Service Engineering Technician	ST0243	3	10	
	Senior Equine Groom	ST0167	3	10	
	Advanced Golf Greenkeeper	ST0209	3	0	
	Animal Care and Welfare Manager	ST0399	3	0	
	Crop Technician	ST0639	3	0	
	Forest Craftsperson	ST0224	3	0	
	Livestock Unit Technician	ST0449	3	0	
	Environmental Practitioner (Degree)	ST0777	6	0	
	Professional Forester (Integrated Degree)	ST0944	6	0	
TOTAL				190	
Routes	Standard/framework	ST Code	Level	NE Starts	
Leisure, travel and Tourism	Community Activator Coach	ST0478	2	10	
	Leisure Team Member	ST0504	2	10	

	Cabin Crew	ST0336	2	0
	Travel Consultant	ST0338	3	40
	Sporting Excellence Professional	ST0606	3	20
	Community Sport and Health Officer	ST0479	3	10
	Outdoor Activity Instructor	ST0480	3	10
	Personal Trainer	ST0482	3	10
	Advanced Sports Turf Technician	ST0630	3	0
	Sports Coach	ST0486	4	20
	Outdoor Learning Specialist	ST0481	5	0
	Curator	ST0501	7	10
	TOTAL			140
Routes	Standard/framework	ST Code	Level	NE Starts
Art and Media	Print Operative	ST0613	2	0
	Sewing Machinist	ST0322	2	0
	Content Creator	ST1352	3	40
	Print Technician	ST0612	3	10
	Bespoke Furniture Maker	ST0202	3	0
	Creative Industries Production Technician	ST0622	3	0
	Creative Venue Technician	ST0251	3	0
	Cultural Learning and Participation Officer	ST0532	3	0
	Event Assistant	ST0300	3	0
	Fitted Furniture Design Technician	ST0329	3	0
	Library, Information and Archive Services Assistant	ST0253	3	0
	Live Event Technician	ST0254	3	0
	Production Assistant - Screen and Audio	ST0256	3	0
	Digital Community Manager	ST0624	4	0
	Post Production Technical Operator	ST0255	4	0
	Audiovisual Technician	ST0621	5	0
	Journalist	ST0252	5	0
	Creative Digital Design Professional (Integrated Degree)	ST0625	6	10
	Archivist and Records Manager	ST0761	7	0
	Creative Industries Production Manager	ST0623	7	0
	Senior Journalist	ST0257	7	0
	TOTAL			60
Routes	Standard/framework	ST Code	Level	NE Starts
Science and Mathematics	Biomedical Scientist	ST0408	6	10
	Public Health Practitioner - Integrated Degree	ST0708	6	10
	Food Industry Technical Professional (Integrated Degree)	ST0197	6	0
	Bioinformatics Scientist (Degree)	ST0639	7	0
	Ecologist (Degree)	ST0586	7	0
	Operational Research Specialist	ST0636	7	0
	Research Scientist	ST0759	7	0
	Soil Scientist	ST1362	7	0
	TOTAL			20
Routes	Standard/framework	ST Code	Level	NE Starts
Social Science	Professional Economist (Integrated Degree)	ST0642	6	0
	Social Researcher	ST1314	6	0
	Senior Professional Economist (InteGR. Degree)	ST0643	7	10
	TOTAL			10
History Theology	Philosophy			0
TOTAL AY 24/25				13,750

Skills demand for each one of 8 NELSIP sectors

The validation process also included a detailed analysis for each of the eight high-impact sectors, outlining sector profiles and their main challenges, priority occupation demand, and technical skills priorities. The table below summarise the Technical Skills identified.

Priority Sector	Skills demand by sector	Priority Occupations (SOC 2020 Codes & Titles)	Strategic Skill Injection Focus
Advanced Manufacturing	Transition from mechanical to mechatronics; Industry 4.0 automation. Immediate need for high-integrity Fabrication and Welding (517% spike in Defence postings). Addressing the "capacity trap" for SMEs (87.3% of firms) who struggle with the overhead of multi-year apprenticeships.	1121 Production managers; 2122 Mechanical eng; 2123 Electrical eng; 2124 Electronics eng; 2125 Production/process eng; 2126 Aerospace eng; 2127 Eng. project managers; 2133 IT analysts; 2134 Programmers; 3112 Electrical techs; 3113 Eng. techs; 3116 Planning techs; 5211 Sheet metal; 5213 Welders; 5221 Machining setters; 5223 Metal working fitters; 5231 Vehicle techs; 5234 Aircraft maintenance; 5250 Skilled trade supervisors.	PLCs, Robotics, and Digital Twin technology.
Clean Energy & Energy Transition	Immediate demand for High-Voltage (HV) engineering and subsea electrical technicians with niche wiring skills. Addressing the 77% forecasted workforce growth and regulatory safety thresholds for offshore environments. Medium-term focus is on GWO safety standards.	1121 Production managers (manuf); 1122 Production managers (constr); 2121 Civil eng; 2122 Mechanical eng; 2123 Electrical eng; 2124 Electronics eng; 2125 Production/process eng; 2127 Eng. project managers; 2453 Quantity surveyors; 2455 Constr. project managers; 3113 Eng. techs; 3120 Draughtspersons; 5213 Welders; 5221 Machining setters; 5223 Metal working fitters; 5241 Electricians; 5242 Telecoms installers; 5249 Electrical trades n.e.c.	GWO Safety Standards and HV systems.
Tech, Digital & AI	Shift from Generative AI to "Agentic AI"—autonomous agents capable of orchestrating multi-step business workflows. Current scarcity of infrastructure technicians and full-stack developers. Addressing the 5-year skills obsolescence cycle.	1137 IT directors; 2113 Biochemists; 2114 Physical scientists; 2123 Electrical eng; 2131 IT project managers; 2132 IT managers; 2133 IT business analysts; 2134 Programmers; 2135 Cyber security; 2136 IT quality/testing; 2139 IT professionals n.e.c.; 2161 R&D managers; 2433 Actuaries; 2439 Business/admin n.e.c.; 2481 Quality control eng; 2482 QA professionals; 3111 Lab techs; 3132 IT user support; 3544 Data analysts; 5242 Telecoms installers; 5244 Computer system installers.	Applied AI integration and Data Assurance.
Life Sciences & Pharma	Sterile manufacturing and Good Manufacturing Practice (GMP) validation. Critical shortages in Qualified Persons (QPs) and senior QA professionals due to high regulatory barriers. Regional outflow of mid-career scientific talent in 5-10 year experience bands.	1121 Production managers; 2111 Chemical scientists; 2112 Biological scientists; 2113 Biochemists; 2134 Programmers; 2161 R&D managers; 2434 Business research; 2440 Business/finance project managers; 2482 QA professionals; 3111 Lab techs; 8113 Chemical process operatives.	Biologics and sterile environment modules.

Defence, Security & Space	Immediate requirement for Software and Systems Engineers with Security Vetting readiness. Convergence of Defence and Space requiring Orbital Analysts—hybrid roles needing physics, data analytics, and situational awareness expertise.	2111 Chemical eng; 2114 Physical scientists; 2121 Civil eng; 2122 Mechanical eng; 2123 Electrical eng; 2124 Electronics eng; 2125 Production eng; 2126 Aerospace eng; 2133 IT business analysts; 2134 Programmers; 2135 Cyber security; 3113 Manuf. eng; 3543 Project support; 5213 Welders.	Orbital Analysis and Security Vetting readiness.
Construction	Net-zero retrofit and low-carbon heat system installation. Focus on "next generation skills" for Sunderland's £11-13bn heat network and building safety compliance. Addressing the systemic site-readiness gap where conversion from full-time college learners remains low (20%).	1122 Production managers (constr); 2121 Civil eng; 2151 Town planning techs; 2152 Chartered architectural techs; 2451 Architects; 2452 Planning officers; 2453 Quantity surveyors; 2454 Chartered surveyors; 2455 Constr. project managers; 5214 Pipe fitters; 5241 Electricians; 5311 Steel erectors; 5312 Stonemasons; 5313 Bricklayers; 5314 Roofers; 5315 Plumbers/heating installers; 5316 Carpenters; 5317 Glaziers; 5330 Constr. trade supervisors.	Retrofit, Heat Pumps, and BIM digital tools.
Creative Industries & Content	Virtual production and freelance business readiness. Addressing the "resetting" of graduates who lack hands-on experience with industry-standard cine-level equipment. Upskilling for "360-degree digital creatives" (shoot, edit, graphics, AI).	1131 Financial managers; 1132 Marketing/sales directors; 1137 IT directors; 1255 Creative industry managers; 2132 IT managers; 2134 Programmers; 2141 Web design; 2142 Graphic/multimedia designers; 2432 Marketing managers; 2451 Architects; 2472 Archivists; 2491 Newspaper editors; 2492 Journalists; 2493 PR professionals; 3411 Artists; 3412 Authors; 3413 Actors; 3415 Musicians; 3416 Arts producers; 3417 AV technicians; 3556 Creative designers.	Unreal Engine and 360-degree digital content creation.
Adult Social Care	Sustained demand for Care Workers (SOC 6135). Addressing the "retirement cliff" where 29% of the workforce is aged 55+. Medium-term focus on clinical-adjacent skills (pressure care, medication management) and "Virtual Ward" digital record systems.	1172 Social services managers; 1232 Residential/domiciliary care managers; 2461 Social workers; 6135 Care workers/home carers; 6136 Senior care workers.	Telehealth and "Virtual Ward" remote monitoring.

The two data collection and their relative analysis supported the table mapping below, strategic element to support the regional context overview and skills need analysis adopting an evidence base approach. Notably, the achievements are not directly related to annual starts. Some provision spans more than one year, so learners may begin in one reporting period and achieve in a later one. As a result, achievement figures can extend across multiple years and should be interpreted separately from starts.

Apprenticeship occupational routes	NELSIP Sector 26/29	Priority	Academic Year 24/25	Year	Achievement Breakdown by Level	Main Standard Framework starts (not all)
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Business Administration (20.4% of the total starts)	All the 8 NELSIP Priority sectors but not a skill priority	Starts - 2,800 Ach. – 1,720	L2 -10 L3 -1,050 L4 – 130 L5 – 290 L6 - 80 L7 - 160	Bus. Admn. (660) TL (510) Ops Mng (440) SL (140) Chartered Mng (100) Associated PM (90) HR Support (90) People Professional (80) Improvement pract. (50) Senior People Professional (50) School Business Professional (50) Impr. Tech. (30) Learning & Develop. (30) PM (20)
Construction and Building Environment (13.5% of the total starts)	Construction Offshore wind and Energy transition	Starts – 1,860 Ach. – 1,060	L2 -570 L3 -380 L4 – 80 L6 - 30	Carpentry and Joinery (160) Inst. & Maint. Electr. (120) Bricklayers (110) Plumbing & Heating tech. (900) Const. Plant op. (80) Craft Carp. And joinery (60) Scaffolders (40) Civil Eng. Tech. (30) Ground workers (30) Painter & decorator (30) Roofer (30) Const. design & Build tech. (20) Constr. Site supervisor (20) Fire emergency and Security system (20) Gas eng. (20)
Engineering and Manufacturing (11.5% of the total starts)	Advanced Manufacturing Offshore wind energy transition Defence, Security and Space	Starts – 1,530 Ach. – 790	L2 -270 L3 -1,120 L4 – 60 L6 - 70 L7 - 10	Eng. Tech (310) Motor Vehicle Serv.Maint. (120) Maint. & op. eng. Tech. (110) LMO (100) Eng. Fitter (90) Machining Tech. (90) Metal Fabr. (80) Autocare Tech.(70) Plate Welder (50) Eng. Manuf. Tech (40) Bus & Coach eng. Tech. (30) Eng. Design tech (30) Eng. Op. (30) Electr. & electronic eng. Degree (20) Vehicle damage paint tech. (20) Welder (20)
Care Services (9.8% of the total starts)	Social Care	Starts – 1,350 Ach. – 650	L2 -200 L3 -210 L4 – 130 L5 - 90 L6 - 30	Adult Social workers (200) Lead Adult Care Worker (200) Children, young people, and Families pract. (100) Leader in AC (60) Children, young people, and Families mng. (30) Leader pract. In AC (30) Social worker4s (integrated degree (30) Youth Support worker (10)
Health & Science (9.3% of the total starts)	Life Science, Pharma and Process and Social care	Starts – 1,280 Ach. – 1,050	L2 -150 L3 -490 L4 - 10 L5 - 150 L6 - 190 L7 - 70	Dental Nurse (150) Ambulance support worker (120) Nursing associate (120) Senior Healthcare Support workers (90) Registered Nurse degree (80) Pharmacy Service Assistant (60) Pharmacy tech. (60) Adv. Clinical pract. (50) Healthcare support workers (50) Ass. Pract. Health (20) community Activator Coach (20) Healthcare Science pract. (20) paramedic (20) Scientist (20) biomedical scientist (10) Diagnostic Radiographer (10)
Digital (6.9% of the total starts)	All the 8 NELSIP Priority sectors	Starts – 950 Ach. – 550	L3 - 380 L4 - 350 L5 - 20 L6 - 110 L7 - 80	Data Tech (220), Data analyst(170) Inf. Commun.Tech (130) digital & tech.solution (90) Bus. Analyst (70) Digital & tech. solute.specialist (60) Cyber security (30) Network eng. (30) Software dev.(30) AI data specialist (20) data eng. (20) Digital support eng. (20) Creative Digital Design. Prof. (10)
Sales Marketing and procurement (6.6% of the total starts)	All the 8 NELSIP Priority sectors	Starts – 910 Ach. – 580	L2 - 330 L3 - 160 L4 - 80 L6 - 10	Customer serv. prac. (260) digital Marker (30) Customer Service specialist (20) Housing and property mng. (20) proc. And SC pract. (20) retails mng. (20) Retail TL (20) Sales executive (20) Digital marketer (integrated degree) (10) Procurement ad SC assistance (10) Senior Housing and property mng. (20)
Transport & Logistics (2.5% of the total starts)	Advanced Manufacturing and Offshore Wind Energy transition	Starts – 340 Ach. – 160	L2 - 130 L3 - 40	Supply Chain Warehouse operative (40) Express delivery op. (10) LGV driver C+E (10) SC prac. FMCG (10)
Creative and Design (0.4% of the total starts)	Creative industries	Starts – 60 Ach. – 30	L3 – 20	Content creator (20)

Demonstrate Alignment with the LSIP Guidance

The NELSIP transitions the region from a consultative model to a towards a Joint Ownership Model, merging employer-led insights with the economic strategic planning of the North East MSA. This co-designed operational mechanism ensures the NELSIP serves as a key delivery tool for the Local Growth Plan as the region moves toward Integrated Settlement.

Drafting and Submission: The NEAA and the North East MSA worked together to develop the NELSIP content, ensuring full alignment with the North East Combined Authority Local Growth Plan and reviewing and discussing NELSIP findings in weekly project meeting all through during the draft timeframe.

Aligning with the UK’s Modern Industrial Strategy

The NELSIP 2026/29 focus on eight priority sectors translate the UK Modern Industrial Strategy into regional action. This framework ensures local investments drive national competitiveness by mapping regional assets to two distinct categories:

- **Frontier Industries:** The NELSIP supports the high-level technical skills demanded by the Industrial Strategy’s focus on Advanced Manufacturing, Clean Energy Industries (covering Offshore Wind & Energy Transition), Digital and Technologies (covering Tech, Digital & AI), Defence, Security, and Space, and Life Sciences (covering Life Science, Pharma & Process).
- **Foundational Sectors:** The Industrial Strategy emphasises the resilience and growth of foundational industries, including Construction, and Social Care. The NELSIP ensures high-volume skills pipelines for these sectors, recognising them as essential for economic stability and critical public services.

For the North East, this drives the priority for high-level technical provision in areas such as high-voltage electrical engineering, heat pump installation, and retrofit skills. The LSIP’s sectoral priorities for Clean Energy are specifically designed to meet the estimated scale of the workforce needed to deliver the Clean Power 2030 Mission.

Aligning NELSIP with the North East Combined Authority Local Growth Plan

The NELSIP 26/29 are integral components of the broader strategic vision articulated in the North East Local Growth Plan (LGP) and New Deal for North East Workers creating real opportunity:

The five core Missions of the Local Growth Plan and their direct linkage to the NELSIP are detailed below:

- **Mission 1: Home to a growing and vibrant economy for all:** Aims to create thousands more good jobs, leading to higher employment and rising the individual wages.
Alignment: NELSIP directly supports this mission by aiming to ensure people have the skills to access work and provide the right conditions for economic growth by ensuring skills provision enables businesses to fill vacancies and expand.
- **Mission 2: Home of the green energy revolution:** Aims for the North East to lead the low-carbon economy and transition to Net Zero.
Alignment: NELSIP directly supports this mission identifying specific skills prioritisation, immediate and substantial curriculum development, infrastructure investment (such as the proposed green energy super academy), and workforce pipeline planning within the framework established by the NELSIP. Particularly supporting *Becoming the Home of the Green Energy Revolution* (driving Offshore Wind & Energy Transition skills), including the ambition to grow the offshore wind workforce to 24,000 by 2035.
- **Mission 3: A welcoming home to global trade:** Aims to exceed national Foreign Direct Investment (FDI) rates and increase international visitors.
Alignment: NELSIP directly supports this mission by providing focused workforce skills development for the eight priority sectors to strength their competitiveness, export capabilities and supporting their growth.
- **Mission 4: Home of real opportunity:** Aims for improvements in skills, digital inclusion, and health outcomes, and a substantial reduction in child poverty.
Alignment: NELSIP directly supports this mission by placing a primary emphasis on social inclusion and the removal of systemic barriers. This involves identifying the specific barriers faced by disadvantaged and under-represented groups and propose solutions to improve their access to training and employment.
- **Mission 5: A North East we are proud to call home:** Aims to deliver more affordable housing and a green, integrated transport network.
Alignment: Supports this through ensuring the construction and infrastructure sectors (part of the Foundational Economy) have the capacity and workforce skills to deliver major infrastructure projects, such as the proposed new local rail, bus services, and affordable houses.

Identification of Priority Skill Needs

The methodology leveraged the strategic priorities of the North East MSA and the National Industrial Strategy to identify the regional priority sectors with the highest growth potential. This involved aligning the NELSIP with the five core missions of the North East Local Growth Plan:

NELSIP Key Sectors			
Advanced Manufacturing; Creative Industries & Content; Defence, Security & Space; Life Science, Pharma & Process; Offshore Wind & Energy Transition; Tech, Digital & AI; Construction; Social Care.			
Strategic Drivers			
<ul style="list-style-type: none"> ● Resilience Imperative in response to Global Dynamics ● Rapidly Accelerating Digital and AI Capability & Cyber Security ● Clean Energy and Sustainability 			
NE Local Growth Plan	New Deal for North East Workers	NELSIP Cross Sector Themes	NELSIP Priorities

<p>Mission 1 Home to a growing and vibrant economy for all: Ensuring skills provision enables businesses to fill vacancies and expand.</p> <p>Mission 2: Home of the green energy revolution: Driving Offshore Wind and Energy Transition skills.</p> <p>Mission 3: A welcoming home to global trade: Focused workforce development for Advanced Manufacturing, Life Sciences, and Defence to strengthen the region's competitive edge.</p> <p>Mission 4: Home of real opportunity: Linking skills development to community-based employment in the Foundational Economy with an ambition to support with diversifying the workforce.</p> <p>Mission 5: A North East we are proud to call home: Ensuring construction and infrastructure sectors have the capacity to deliver major rail, bus, and housing projects.</p>	<ol style="list-style-type: none"> 1. Build a bigger, better skilled, more diverse workforce 2. Creating career pathways that enable employers to recruit and retain skilled staff 3. Targeted support to improve employment rates for all residents 4. Tackling barriers that prevent residents getting into, and getting on at work 	<ul style="list-style-type: none"> • Injection of advanced and higher-level technical skills is required across all sectors • Rapid development and deployment of digital technologies and AI are changing jobs, requiring both new digital skills and new analytical and soft skills to augment the technologies • Strong cross-sector competitive demand to fill entry-level roles, but foundation skills and work-readiness limit the supply of qualified candidates • In-region ERB/employer/provider partnerships are providing opportunities for a cohesive Skills Ecosystem - centres of excellence for an agile response to training demand. • Most SMEs lack resource to navigate the education and training system to access vocational training programmes and pathways • Greater workforce inclusion is a regional economic priority, but requires interventions to assist employers and residents • Global dynamics and economic conditions are requiring employers to take a cautious approach to future workforce and skills planning. 	<ol style="list-style-type: none"> 1. Improve digital capability at all levels, and integrate skills required to augment new technologies into provision. 2. Increase the supply of Level 3-8 technical skills to meet current and future requirements across all NELSIP sectors. 3. Increase regional workforce resilience through development of transferable foundation and employability skills 4. Establish centres of excellence for skills development through collaboration between education & training providers, and ERBs. 5. Increase SME participation in technical and vocational training 6. Establish clear and effective vocational pathways into entry level roles 7. Prioritise social inclusion - enabling wider workforce participation through skills development and inclusive employment practices
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Environmental and Net Zero Goals

In accordance with Section 1(6) of the Skills and Post-16 Education Act 2022 which places a legal duty on the NELSIP to explicitly consider skills that contribute to Net Zero, climate adaptation, and environmental goals. The Statutory Guidance references the Clean Energy Jobs Plan, which forecasts a requirement for 400,000 new jobs in the clean energy sector by 2030 across the UK.

Crucially, the North East is identified as a critical engine for this transition and the NELSIP distinguishes between two distinct skill requirements to meet the Clean Power 2030 Mission:

- Deep Green roles are acute, highly specialised technical positions, such as high-voltage electrical engineers for offshore wind and battery technicians for the electric vehicle supply chain. The NELSIP forecasts that the North East will need to grow its offshore wind workforce to 24,000 by 2035 to meet demand.
- Green Enabler skills are broader competencies required across the general economy, such as carbon literacy, sustainable procurement, and advanced energy monitoring. These skills are vital for businesses in high-energy consumption sectors like Life Sciences and Tech, where managing energy as a critical variable in production is necessary to mitigate rising operational costs.

The methodology identifies specific environmental interventions across the priority sectors. In Construction, the focus is on a rapid pivot from traditional gas boiler skills to low-carbon retrofit and heat pump installation for the region's existing housing stock. In Advanced Manufacturing, the driver is the transition from the internal combustion engine (ICE) to electric vehicles (EV), necessitating investment in mechatronics and high-voltage systems.

Equality of Opportunity and Social Inclusion

The NELSIP 2026/29 identified that addressing the region's skills shortages requires broadening the talent pool and removing barriers to entry. Consideration was given to those populations under-represented in the skills system and in the workforce, including gender, ethnicity relative

to local representation levels, those in areas of deprivation, those currently economically inactive, those with health conditions, and learners with learning difficulties and/or disability (LLDD).

Addressing Economic Inactivity and Health Barriers

The North East suffers from the UK's highest economic inactivity rate (26.3%), with 101,800 people inactive due to long-term sickness. The NELSIP methodology addresses this through the Economic Inactivity Trailblazer, a £10 million pilot program that integrates health services directly with skills training to support neurodiverse individuals and those with long-term conditions back into the labour market.

Inclusive Programs and Targeted Outreach: Several specific social inclusion initiatives are integrated into the NELSIP.

The NELSIP have identified a number of initiatives which promote ED&I. These are cross sector and are considered as best practice to promote and support. These include (and not substantive)

- **SHINE:** A regional movement of over 100 employers committed to fair pay, inclusive upskilling, and employee voice. SHINE celebrates organisations that remove barriers for under-represented groups and adopts the "North East Mayor's bold new standard for employment".
- **EmPower:** An initiative hosting 1,000 Year 8 girls to shape the next generation of women in tech and AI, combating the significant gender gap in these industries.
- **NE Ambition:** A strategic framework designed to bridge the gap between untapped potential and high-growth roles, ensuring a resilient and inclusive workforce.
- **Inclusive Pathway to Advanced Manufacturing (IPAM):** A pilot project in South Tyneside that successfully enabled 14 additional Level 3 apprenticeship starts by addressing the cost barriers for SMEs and under-represented groups, demonstrating a successful model for social inclusion in high-tech sectors.

Identifying Barriers to Inclusion

The process focus was also to identify specific physical and digital barriers that prevent residents from accessing training. Through our consultations, we identified:

- **Physical Barriers:** Transport in rural Northumberland and County Durham remains a major hurdle. We also identified that a lack of affordable childcare prevents many women, who make up 81% of the social care workforce, from progressing into higher-level training.
- **Digital Barriers and Digital inclusivity:** We found that 69% of regional workers have no recorded digital training. This "Digital Divide" is a barrier to adopting AI and Industry 4.0 technologies.
- **Health and Disability:** Through our £10m Economic Inactivity Trailblazer, we identified that integrated health support is a prerequisite for skills training for our 101,800 residents out of work due to long-term sickness.

NELSIP 26/29 Governance Structure

Governance Structure – Development Phase

In total 167 organisations have provided input into the development of the NELSIP through over 1,200 touchpoints. During the development of the NELSIP the following structure was put in place to ensure engagement, participation, and input from key stakeholders:

- **LSIP Project Development Board** - comprising of the NEAA and North East MSA met bi-weekly to provide oversight and management of the LSIP development.
- **Employer Representative Bodies (ERBs)** – The NELSIP recognised that ERB's have extensive employer networks and are regular contact with their members, placing them at the forefront of employer engagement. In total 24 different ERBs were engaged in the development of the NELSIP through a combination of meetings, structured interviews, surveys, and workshops. ERBs provided access to their employer networks which facilitated further direct input from 105 employers. ERBs also provided valuable data and insight into their respective sectors, outlining growth opportunities, constraints and technology trends that inform employer demand, and validated the NELSIP findings throughout the process.
- **Local Authorities** – Six of the regions seven local authorities were engaged in the development of the NELSIP, providing input through meetings, workshops and access to skills groups providing a sub-regional context for the NELSIP.
- **FE and HE Providers** – FE and HE providers have played a central role in the development of the NELSIP. Primary engagement has been through Colleges for North East England and Universities for North East England as key strategic regional alliances across FE and HE. Individual colleges and universities were engaged on a one to one basis also. In total 28 organisations have provided input through a combination of meetings, structured interviews, workshops, and surveys.
- **Other Stakeholders** – Further input has been gleaned from a wider range of other stakeholders including the Apprenticeship Ambassador Network, Blyth Value Disabled Forum, Cogent Skills, DWP and Jobcentre Plus, Engenuity, Gatsby, HMP Northumberland, Primary Engineer, Royal Academy of Engineering, and the Catapult Network.

Governance Structure – Deployment Phase

The NELSIP governance arrangements will reflect the importance of aligning key stakeholders in the North East to provide strategic oversight, monitor progress, and represents a transition to a joint ownership model which combines employer-led insight with the economic strategic planning of the North East MSA.

Strategic Oversight Board (SOB): A strategic oversight board will include representation from North East MSA, the NEAA (as the Designated ERB), representatives from employers and ERBs in key sectors, along with representatives from FE Colleges, Independent Training Providers (ITPs), HE Institutions and other key stakeholders. The strategic oversight board will monitor progress against the overall plan, retain oversight of the cross-cutting themes and systemic challenges that span all key sectors, and identify additional strategic actions, including alignment of devolved skills funding, required to enable delivery of the plan and support the objectives of the Local Growth Plan and the New Deal for North East Workers and the broader ambitions of the UK Government set out in the UK Modern Industrial Strategy.

Sector Skills Partnerships (SSP): Eight specialised SSPs will be established representing the key priority sectors growth. These will be created either by utilising an existing sector focused skills group or by establishing a new group if no such group exists within the sector. Each SSP will own the sector-specific priorities that feed into the overarching NELSIP and report on progress to the SOB. It is envisaged that each SSP will include, but not limited to, the following participants

- **ERB** – provides system leadership and coordination of the SSP delivering robust monitoring, reporting, and accountability to ensure activity remains employer-led and fully joined up. ERBs will utilise their extensive employer networks to act as the primary voice of demand. They will aggregate employer demand and intelligence, enabling this to be translated into clear sector priorities and actions. ERBs will support the alignment of regional and national policy.
- **North East MSA** – The Strategic Authority aligns the skills system with regional priorities by setting economic and sector direction, aligning funding with SSP activity, working with the ERB to translate demand into commissioning decisions, and ensuring coherence with wider employment and inclusion agendas.
- **Lead FE College** – FE Colleges will serve as the core delivery engine for technical skills. The lead FE College will align curriculum with SSP priorities and employer demand, co-designing education and training programmes, adapting provision in line with LSIP recommendations, and collaborating with the wider FE College network to ensure delivery across the NELSIP region.
- **Lead HE Institution** – Universities provide advanced skills and innovation capability. The lead HE Institution will ensure the wider NELSIP HE network deliver higher-level and specialist training, supporting innovation-led workforce development and emerging technologies, and aligning research and knowledge transfer with sector skills needs.
- **Independent Training Providers (ITPs) / Specialist Centres** – ITPs and specialist centres operate as an agile delivery layer within SSPs by delivering targeted, short-cycle training, supporting specialist skills development, and enabling rapid scaling of provision in response to employer demand.
- **Employers (SMEs and large firms)** – Employers will articulate short and medium term skills needs and workforce trends, help co-designing training provision and interventions, validating whether delivery is fit for purpose, and supporting implementation through placements, mentoring, and recruitment pipelines.
- **Other key stakeholders** - there are several additional stakeholders that should be engaged to ensure full system alignment and delivery beyond the core partners, these include, but are not limited to, Jobcentre Plus, DWP, Trade Unions, Local Authorities, Professional Bodies, Awarding Bodies, Third Sector/Inclusion Organisations and Economic Development and Investment Agencies.

SSPs will provide wide outreach and unified voice for the sector and create an agile response network that acts as an ecosystem hub to target specific interventions and to access funding to support delivery.



Appendix

- Appendix C- LSIP 2629 SIC codes demand & Mapping SOC priority occupation to Apprenticeship standard
- Appendix C- Assessment of priority skills accompanying tables - Priority occupation