

Skills Investment Plan

for Scotland's historic environment sector



Foreword



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The Skills Investment Plan (SIP) for Scotland's historic environment sector is a partnership document, facilitated by Skills Development Scotland and Historic Environment Scotland on behalf of the Scottish Government.

Scotland's historic environment is an integral and important part of the fabric of our society. It contributes in many ways, not least in economic terms as a key driver of domestic and international tourism, but also in cultural terms by shaping our sense of identity and belonging, creating social cohesion, and enriching and improving people's lives.

The development of this SIP has been supported by a wide range of individuals and organisations who helped identify and prioritise the key actions which will address the skills challenges and opportunities in the sector.

Its success will rely on public, voluntary and commercial organisations from across our sector and beyond working in partnership. Working together to deliver this plan will help us to ensure that we have the talent and skills we need to understand, care for and promote the historic environment for the benefit of Scotland's people, now and in the future.



Neville Prentice,
Senior Director of
Service Development
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We have been proud to work in partnership with Historic Environment Scotland to develop the Skills Investment Plan (SIP) for Scotland's historic environment sector. Its development was supported by a wide range of organisations, employers and individuals who helped identify and prioritise the key actions which will address the skills challenges and opportunities in the sector.

The skills needed within this important sector are as diverse as the sector itself. It not only protects Scotland's heritage through the maintenance of historic buildings and monuments, it also promotes that heritage to individuals from Scotland and to visitors from all over the world. This sector is a key driver for the Scottish economy and it is important that we continue to encourage sustainable economic growth by developing the talent pool and providing exciting career opportunities in this diverse sector.

The Skills Investment Plan confirms the importance of developing the specialist traditional skills needed and of embracing skills needed to both maintain and promote our heritage, by making the most of new technology and the talents of the people who work and volunteer in the sector. These opportunities are set out in an action plan to help the sector respond to the skills challenges of today and the future.

We believe that the implementation of the SIP action plan will make a significant difference and impact on the sector and help Scotland achieve its goal to care for and protect its historic environment.



1 Executive summary

This report presents the findings of research undertaken to develop a SIP and action plan for Scotland's historic environment sector.

Scotland's national strategy for the historic environment, Our Place in Time (OPiT) recognised that a skilled workforce is crucial for the future needs of the sector and that a lack of appropriate skills is a threat which could impact on the management, protection and conservation of the historic environment. Skills is one of four cross-cutting priorities within the strategy and to address this an OPiT skills and expertise sub group was established to develop, monitor and implement any agreed plan and actions.

While existing SIPs for construction, creative industries and tourism contain evidence and actions relating to this sector there was unanimous agreement from government, executive agencies, stakeholders and employers consulted that there should be a stand-alone SIP for the historic environment sector. This SIP aims to also recognise the unique skills needs of the sector and wider skills issues, and address these through the development of a coordinated action plan.

The development of the SIP was supported by a wide range of individuals and organisations who worked together to identify and prioritise key actions.



Apprentice painter, Tracey Clayton, gilding the plinth stone for the Mary Queen of Scots statue that is to be erected at Linlithgow Palace.



2 Characteristics of the historic environment sector in Scotland

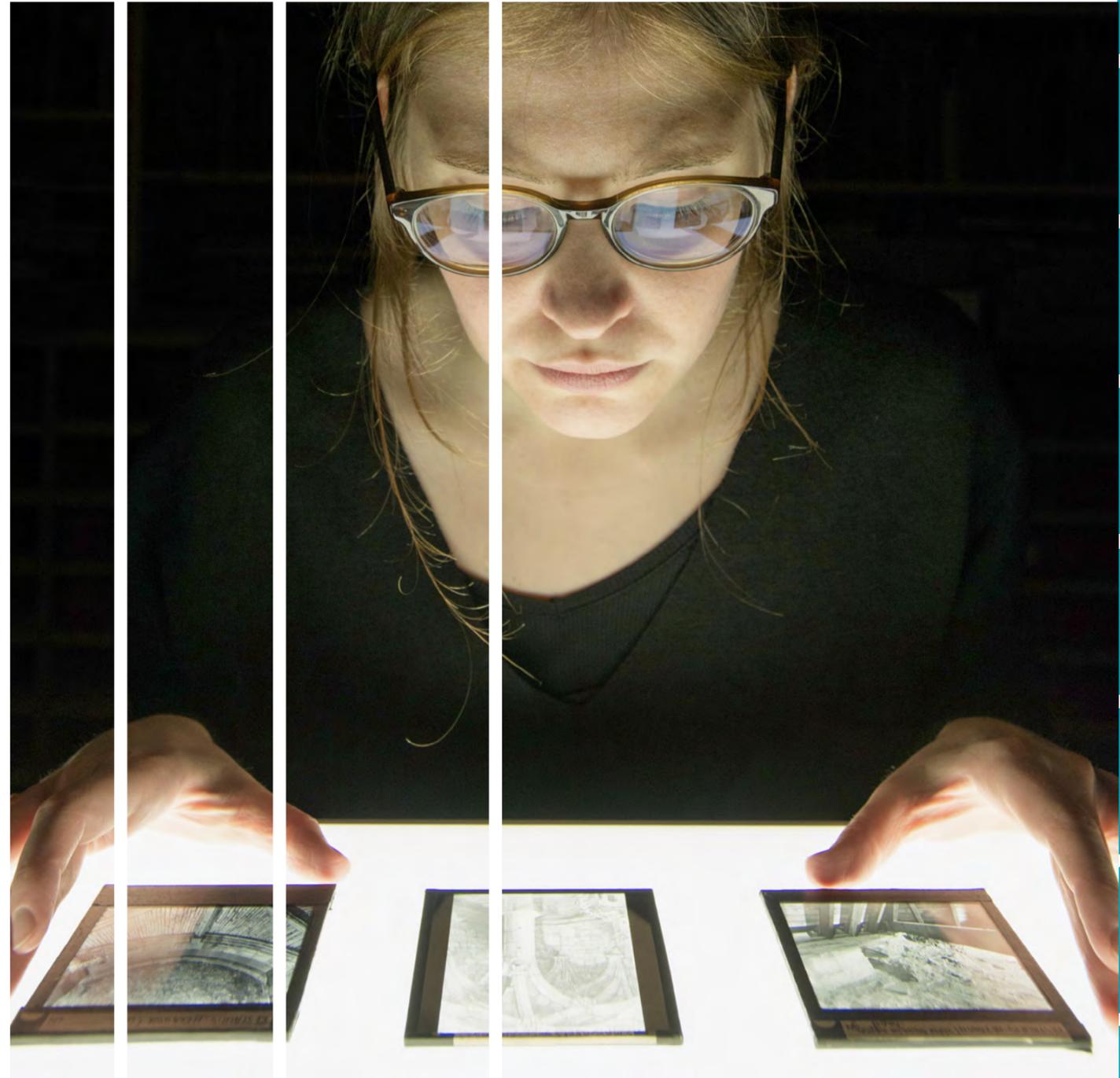
The historic environment is a diverse, complex and culturally important sector spanning several broad market areas.

These include:

- historic and listed buildings and sites
- the built environment
- conservation areas
- gardens/designed landscapes
- tourism and hospitality
- historic landscapes
- museums and galleries.

For the purposes of the SIP, action plan development and any future research, the historic environment sector was defined using Standard Industrial Classification (SIC)/ Standard Occupation Classification (SOC) codes. A dilution factor was applied to each SIC/SOC, identified through consultation with Skills Development Scotland's key sector managers for construction, creative industries, and tourism (detailed in Appendix A).

The sector relies on a wider range of employment type: direct employees, freelancers, researchers, students, and volunteers all of whom may be working full time in the sector, while others only part time or for others a very limited time.



Archive and Library Assistant, Fiona Hall, John Sinclair House Library.



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Scale of the sector

Employment

Scotland's Historic Environment Audit (SHEA) is an assessment of our historic environment and provides statistics on Scotland's heritage assets and details of how these are changing over time. Last published in November 2018, it estimates that the number of jobs (direct and indirect) resulting from economic activity relating to the sector has risen sharply in recent years. This model estimates that there were 66,000 full time-equivalent jobs (direct and indirect) in 2017, an increase of 20% from 55,000 in 2014.

This research aimed to focus on estimating the size of the direct current workforce in the sector, achieved by applying a dilution factor as applied to SIC/SOC codes within the construction, creative industries, and tourism sectors. The limitations in this approach is recognised but tested and validated with the sector through the OPiT skills and expertise sub group and agreed as a formal definition of the occupations within the historic environment sector.

This research estimates that the historic environment sector in Scotland comprises 20,000 FTE direct employees (excluding volunteers).

Volunteer workforce

Volunteers are an important part of the overall workforce and make a significant contribution. Volunteers must be recognised as a key part of the workforce and included when considering future skills requirements. Many organisations are run purely by volunteers or are reliant on them, and they fulfil a wide range of roles and functions.

The volunteer base has been growing, and that trend is expected to continue which raises many challenges, including the need to diversify the volunteer base, which can be perceived as being 'older'.

There is a need to improve recruitment and management of volunteers by, for example, building skills levels beyond the narrow 'technical' focus to encompass other roles, providing training to maintain the professional standing of the organisation and undertake succession planning.

There are reported to be at least 17,000 volunteers actively engaged in Scotland's historic environment sector. However, given the difficulty in defining and tracking those involved in this broad sector this figure is likely to significantly under-represent the true level of volunteering in the sector.



Primary school pupils attending Digifest 2018: History is your playground at the Engine Shed in Stirling.

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Skills demand and the skills landscape

Over recent years there has been various reports of skills shortages facing the sector and widespread industry concern that a lack of appropriate skills in the future could be a threat which may impact on the management, protection and conservation of the historic environment. There is an expectation that there will be an increased demand for a wide range of specialist historic environment skills in future. Key drivers of change identified included:

- significant increase in tourism (heritage tourism)
- policy agenda for improving and widening access to heritage assets
- enhancing the overall visitor experience, including technological and digital transformation
- climate change affecting the condition of heritage buildings
- increased commercial focus for heritage organisations requiring a diversification of skills.

The SIP aims to support existing strategies which include Our Place in Time, Tourism Scotland 2020, Heritage Tourism 2020, Scotland's Archaeology Strategy 2015 and Traditional Building Skills Strategy. Key messages from these existing strategies include:

- a need to protect, maintain and develop the professional and specialist skills required to carry out the appropriate care, management and promotion of the historic environment
- a need to educate and stimulate demand for traditional building and archaeological skills
- ensuring that there is a strong supply of skilled people (within the existing workforce and new entrants) with traditional and specialist skills which in some cases are at risk of being lost
- instil effective succession planning
- increase/improve training and upskilling of the current workforce alongside activities to raise the attractiveness of the sector to new entrants (creating a stronger pipeline of talent).

It is also recognised that the workforce needs to be more flexible and to have a broader range of skills to adapt to ongoing changes and this, in part, reflects the need to attract a more diverse talent pool.

Skills gaps

The strategic review identified several skills gaps in the sector, the majority of which are generic business-related skills, like those identified across a range of sectors:

- digital
- leadership and management
- business
- financial and budget planning
- customer service
- marketing.

There is a need to ensure that the supply of skills, training and qualifications meets the requirements of the historic environment sector. Key messages from the review are that:

- a one-size-fits-all approach will not work, and that the sector needs to be flexible and adaptable in its approach to meet both high and low-volume specialist training requirements
- there needs to be greater promotion of vocational routes into and through the sector
- training and CPD needs to better meet the needs of the individual and the individual organisation, including the development of business and management skills
- there is a need for more opportunities for work placements and internships.



5 Current provision

There are a broad range of courses that relate to the historic environment sector. Whilst not all individuals undertaking these courses will enter the sector, the data provides insight into the possible pipeline of talent.

The apprenticeship family

The apprenticeship family is made up of Foundation, Modern and Graduate Apprenticeships.

Foundation Apprenticeships

Four Foundation Apprenticeship frameworks are relevant to the historic environment sector:

- Business Skills
- Civil Engineering
- Engineering
- Creative and Digital Media.

Over 429 individuals were participating in these frameworks in 2017-19, increasing from over 120 in the first cohort intake (2016-18).

Modern Apprenticeships

Some 32 Modern Apprenticeship frameworks relate to occupations identified within the historic environment sector:

- fifteen relating to construction
- six relating to creative industries
- three relating to tourism
- eight other sectors (e.g. rural, land-based).

Over 7,000 Modern Apprentice starts were associated with these frameworks in Q3 of 2017/18 with hospitality and construction: building frameworks accounting for over 3,000 of these starts, (1,650 and 1,520 respectively).

Applying a proxy of 5% to the total number of starts this would equate to 350 Modern Apprenticeship starts that may enter roles in the historic environment sector every year.

Graduate Apprenticeships

The Construction and Built Environment Graduate Apprenticeship (SCQF 10) would also be of relevance to those in the historic environment sector. Graduate Apprentices are employed and spend around 80% of their time in work and 20% at university or college. This integration of work and learning means that the work they carry out day-to-day counts towards their qualification.



3D scanning of the Fore Well at Edinburgh Castle.



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Current provision continued

Foundation Apprenticeships support senior school pupils in Scotland to gain qualifications through work-based learning.

Foundation Apprenticeships provide qualifications which are at the same level of learning as a Higher (SCQF Level 6) and offer a range of positive post-school destinations and pathways to a future career. Foundation Apprenticeships widen the range of positive progression routes and post school destinations into employment including Modern Apprenticeships, Graduate Apprenticeships, college and university.

Modern Apprenticeships provide on the on-the-job experience while working towards a qualification, and can be used to train new staff or upskill existing employees. There are over 80 frameworks available.

Graduate Apprenticeships provide work-based learning opportunities for employees up to a Master's level (SCQF Level 11). There are currently 12 frameworks delivered in partnership with 14 university and college partners.

Individuals undertaking the Graduate Apprenticeship are prepared for a career in a variety of historic environment job roles, such as architectural technology, building surveying, facilities management, planning & development and construction management.

The Construction and Built Environment Graduate Apprenticeship was introduced in 2018 and was available through Edinburgh Napier University, Glasgow Caledonian University, Heriot-Watt University and Robert Gordon University.

School provision **Introduction to construction: design & build Senior Phase Pilot**

A new qualification introducing work-based learning at SCQF Level 4 in construction was piloted at Brechin High School during academic year 2017/18 with a cohort of 15 pupils. The format of the pilot qualification was developed by Skills Development Scotland to test an approach to work-based learning in school that would align with the apprenticeship family.

The pilot has been expanded to SCQF level 4 & 5 in 2017/18 with the aim of providing broad experience of a sector at an introductory level while allowing for career exploration through project and work-based learning opportunities.

College provision

A total of 47 college courses were related to the occupations within the historic environment sector. In 2016/17, almost 60,000 students were completing one of the related courses. Applying a proxy of 5% to the total number of students studying a related course, this equates to a potential pipeline of 3,000 college students that would provide a pipeline of talent for the sector.

The number of students undertaking a related course has fallen by 15,600 students since 2010/11 and the decrease can be traced primarily to four subject areas:

- languages (-4,000)
- hotel/catering (general) (-3,200)
- art techniques/practice (-2700)
- construction (general) (-2,100)

Historic environment related courses have a greater gender imbalance than the total college provision, 43% of all historic environment students were female in 2016/17, compared with 49% of all students. However, it is worth noting that the gender imbalance varies by course, and in a number of cases the male students are under-represented.

Similarly, the proportion of students declaring a disability is below the national level (10% compared with 14%) while the proportion of students identifying as Black, Asian, other non-white Caucasian closely mirrors the national level (14% compared with 13%).

University provision **Undergraduates**

A total of 12 undergraduate subject areas delivered by Scottish universities are of direct relevance to the historic environment sector:

- **Historical and Philosophical Studies (5)**
 - history by period
 - history by area
 - history by topic
 - archaeology
 - heritage studies
- **Architecture/Building/Planning (4)**
 - architecture
 - building
 - landscape and garden design
 - others in architecture, building and planning
- **Creative Arts and Design (2)**
 - cinematic and photography
 - fine art
- **Physical Science (1)**
 - forensic and archaeological studies

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Current provision continued

In 2015/16, a total of 13,375 students were completing a historic environment related course. Historical and philosophical studies had the highest concentration of students, accounting for half of all historic environment related courses.

Applying the proxy of 5%, this estimates 670 undergraduate students could enter the historic environment sector.

Postgraduates

Like undergraduate subject areas, the same 12 subject areas relating to historic environment are also available for postgraduate studies. In 2015/16, a total of 2,985 students were undertaking postgraduate studies relevant to the historic environment sector. Again, if the 5% proxy is applied, this estimates a total of 150 postgraduate students could enter the sector.

Equalities in undergraduate and postgraduate courses

Considering both undergraduate and postgraduates, the historic environment sector has gender imbalances – creative and arts-related subjects have a greater proportion of female students than the national level (66% compared with 55%) whilst in contrast female students are under-represented in history-related (50%) and architecture/building/planning and (47%).

Both history and related (12%) and creative and art-related (11%) subjects have a greater concentration of students declaring a disability than the Scottish level (7%). Architecture/building/planning mirrors the national level.

The proportion of students identifying as Black, Asian, other non-white Caucasian again differs by subject area; architecture/building/planning is above that of Scotland (24% compared with 21%) however creative and art-related and history-related are both below (13% and 10% respectively).

Wider training

There is other specialist provision delivered by key stakeholders in the sector. This provision is specialist and targeted to the historic environment sector. A range of programmes and initiatives of note are delivered by Historic Environment Scotland, The Engine Shed, Museum Galleries Scotland, National Museums of Scotland, Museums Association, National Trust for Scotland, Built Environment Forum Scotland and Scottish Traditional Building Forum.

There is a varied offer across these organisations that targets and improves skills for new entrants, as well as developing specialist skills CPD activity, providing pathways into the sector and raising the profile of the sector in schools.

Case studies

Go Forth!

Digital learning resources

A major new educational resource is now available to all Scottish schools, using 3D digital documentation of the three Forth bridges to support the teaching of STEM subjects and the Curriculum for Excellence.

The recording of all three Forth bridges was completed with funding from the Scottish Government, creating photo-realistic 3D models from the accurate point cloud data. With digital models for all three bridges complete, work commenced on generating learning resources designed to inspire school pupils, the aim being to generate an interest in the bridges themselves, and to stimulate an enhanced take-up in associated science and technology subjects.

Working with the assistance of technical teaching expertise from Dundee City Council, the Centre for Digital Documentation and Visualisation LLP (CDDV), a partnership between Historic Environment Scotland and The Glasgow School of Art has created several teaching packages all of which are available through Education Scotland's Glow network.

These include:

- **Go Forth and Discover** – a digital game and lesson pack
- **Go Forth and Design** – a Tinker CAD and 3D resources and lesson pack
- **Go Forth and Create** – a Scratch coding resources and lesson pack
- **Go Forth, See and Hear** – 360-degree virtual reality experiences, available on Forth Bridges website
- **Go Forth and Explore** – a location-based app, which will be available free of charge through app stores.



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Current provision
continued

Next Step Initiative: The Ethnic Minority Career Museum and Built Environment Heritage Programme

Next Step Initiative is a charity and leading ethnic minority social enterprise that works to empower, improve and transform the quality of life of African communities in Scotland through the support of its strategic heritage partners, has created this unique and exciting new skills training programme.

This programme's aim is to widen and strengthen skills development and access of people from the African and Caribbean/ethnic minority communities across Scotland into the world of both the museum and built environment heritage sector and supported through the Heritage Lottery Fund's National Skills for the Future Initiative. The programme comprises of grant-bursary supported training placements for 2019/20, hosted by leading heritage organisations in Scotland. Host partners include: Historic Environment Scotland, Edinburgh Museums and Galleries, David Livingstone Trust and Edinburgh World Heritage. Placement offers trainees the opportunity to gain a rich variety of skills at the frontline of heritage practice. Trainees are supervised and mentored by experienced professionals, both in their host organisations and beyond, to work on a range of activities to acquire a selection

of heritage management skills, for example; learning and interpretation, collections management, conservation, audience development, marketing and fundraising.

Building History – Dig It!

Building History is a skills initiative that aims to integrate construction and archaeology teaching, enabling the future workforce to better collaborate and appreciate the value and practice of the other.

During the four-day pilot project, archaeology students underwent construction training, while construction students received archaeology training. The groups then worked together on a survey and dig at the Dunmore Pineapple.

The Construction Scotland Innovation Centre also hosted an open discussion between the two sectors regarding innovative training provision. Building History involved a variety of construction and heritage partners, as well as Society of Antiquaries of Scotland, Archaeology Scotland, Forth Valley College, the University of Stirling and the Scottish Funding Council. In addition to providing free training and networking opportunities for students, Building History created a network of organisations who bought into a core concept and delivered a pilot project to explore its potential.



Archaeology and construction students at Dig It! Initiative, September 2017.





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Current provision continued

Skills for Success

Museums Galleries Scotland (MGS) launched 'Skills for Success' in 2018. Supported by the Heritage Lottery Fund, this national learning programme is designed to help Scotland's museum sector to address issues including a lack of diversity in the workforce; a lack of accessible entry and progression routes; the development of an accredited work-based learning culture in museum sector organisations; and to tackle vital skills gaps.

The programme provides entry level and management level non-graduates from diverse backgrounds with one year paid placements in museums across Scotland. Learners will undertake roles vital to the sustainability of the sector, including collections care and management; digitisation; fundraising and marketing; learning programmes and volunteer management. Meanwhile, they will have access to a bespoke training programme and work towards the SVQ3 in Museums and Galleries Practice.

Skills for Success builds capacity of the sector to deliver accredited vocational qualifications by creating an MGS assessment centre and training sector professionals as assessors and internal verifiers. These assessors and verifiers are then able to use their skills to the benefits of the sector.



City of Edinburgh Council's Skills For Success trainees Susan Murray and Hermione Hoffmann. © Colin Hattersley Photography.

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Key challenges and priorities

Skills challenges

The historic environment's future success will require a focus on:

- raising awareness, appreciation, and development of traditional craft skills
- maintaining the specialist technical skills that underpin the historic environment sector (e.g. some artisan traditional skills are reported to have been lost, or be in critical danger of being lost)
- continual promotion of professional skillsets
- vocational training and learning
- new (and changes in) technical skills and practices arising from the ongoing development of new technologies, approaches, products, materials
- wider underpinning/ supporting skills needed by, but not unique to, the historic environment sector.

In terms of future demand, industry and stakeholders pointed to:

- a continuing demand for stonemasonry and roofing to maintain Scotland's built heritage
- wide areas of skills shortages in roles such as:
 - traditional joiners
 - lime plasterers
 - historic gardeners
 - surveyors
 - archaeologists

- there is, and will continue to be, an increase in demand for skills in areas including:

- ICT and digital
- leadership and management
- business and enterprise
- customer service skills (front of house)
- marketing and communication
- advocacy
- creativity and co-production
- events management.

This emphasises the need for the historic environment SIP to support actions that help to maintain a base of core technical and professional skills, and build skills for sector resilience and growth.

Wider key skills issues and challenges

Stakeholders also identified a wider range of skills issues and challenges facing the historic environment sector. There is a need to:

- address the perceived image and attractiveness of the sector as it is often misunderstood and perceived as being "old-fashioned" among young people, and faces stiff competition from other sectors
- demystify the historic environment sector for young people as many feel that it is "not for them". Action is required to help make this sector a career of choice, and raise awareness of the range of opportunities available

- widen the talent pool and address gender inequality. For example, traditional trades and technical professions attract more male entrants and while more women than men make up the workforce in museums they are less likely to be in senior positions
- build more vocational-skills learning into courses to support the readiness of new entrants (technical/professional and broader skillsets required) and help manage the expectations of those coming into the sector at entry level
- widen entry-level routes and pathways into the sector and educate industry as to the most appropriate routes for the roles
- address the decline in education and training provision of specialist skills
- upskill and develop the existing workforce to meet employer demand
- engage with the whole sector (including hard to reach micro/ small businesses) to support workforce development
- identify qualifications/ accredited training for volunteers to ensure consistency in the workforce and recognised career progression.

It is recognised that the scale and breadth of sector has implications for effective and cost-efficient delivery of training, and it would be difficult to justify major investment in all areas, particularly where demand is low. However, this could be tackled by new approaches to delivery of training and better use of what is already in place to better meet the needs of the sector.

Priorities

The OPiT Skills and Expertise Working Group, in partnership with stakeholder and industry, agreed three priority areas to focus efforts:

Priority theme 1: Engaging the wider sector in skills and innovation

The historic environment sector is a multi-faceted sector spanning all aspects of Scotland's built and cultural heritage, and comprising an equally diverse business structure and workforce. It comprises high levels of self-employment and a significant number of micro and small businesses which are traditionally difficult to engage with effectively.

Engaging with the wider sector to ensure they have appropriate skills to meet the ongoing and future requirements of the sector will be the most significant part of the SIP. It is essential that employers and individuals can access up-to-date information about skills and training. The sector needs to work together to support our new workforce to develop traditional, specialist and commercial skills.





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Key challenges and priorities continued

Aligned to this aim is engaging and influencing skills conversations and investment for the key industries most closely aligned to the sector: creative industries, tourism and the construction sector. In these sectors, Scotland's Innovation Centres also help businesses large and small increase the pace of innovation and support employer engagement in skills. This helps both our economy and our people to flourish and prosper. This is something our sector needs to fully embrace.

Existing Engine Shed plans and activity relating to digital innovation, climate change adaptation of traditional building, demonstrate the success of having a distinct resource to support innovation. While the sector has links with three current innovation centres; Sensor and Imaging System (CENSIS), Construction Scotland Innovation Centre (CSIC) and The Data Lab, there will be benefit in strengthening these links and increasing the focus of the Engine Shed on innovation, working with employers and academia across the wider sector.

Priority theme 2: Attracting future talent and improving access

It will be essential to develop a stronger pipeline of talent and ensure the future workforce has the right knowledge and skills for working in the historic environment sector.

There are outdated perceptions of what it means to work in the historic environment sector, and the image of the sector could be improved among young people (and their key influencers). Working with education to increase awareness of career opportunities as well as influencing the curriculum will enable more young people to consider a career in the historic environment sector and gain valuable work experience and employability skills. This will help to increase the flow of talent into apprenticeships, further and higher education and across different roles within this varied sector.

It will also be important to make key audiences aware of the breadth and depth of different entry routes and career progression opportunities available within the sector to ensure a range of future talent from a variety of backgrounds.

With volunteers so vital to the sector, there is a real benefit in stimulating the interest of young people by promoting volunteering opportunities and offering work placements. These could become an effective entry route into the sector.

There is a perceived need to construct a map of entry and exit points for programmes at all levels, looking at credit equivalence, skills balances and learner needs, to ensure that we are facilitating entry to, and progression through, learning that is flexible, allows entry, exit

and re-entry at various stages in the learner journey, and which eases horizontal mobility between programmes and providers in terms of the current education offer.

One of the other key findings from the research is the increased demand for apprenticeships and the need for employers to have staff with the right skills and training that meets their current and future needs. There is also a need to ensure that specific modules, either as part of mainstream courses or as separate extra-curricular study are available in areas covering:

- business, HR and commercial topics
- understanding the historic built environment
- understanding the natural environment.

Priority theme 3: Workforce development

There is a clear need for traditional skills in both the built and natural environments and to grow the supply of highly-skilled contractors and craftspeople to undertake the work required in the sector. Workforce development is an important issue and will include the use of different apprenticeship models such as Foundation, Modern and Graduate. Consideration should be given to encouraging employers to take positive action to address under-representation in their organisations.

One of the main messages arising from the research is that a more multi-faceted and flexible approach to the delivery of education, skills and training is required to meet the specific needs of the sector and to support future growth.

Geography and accessibility of training provision in urban locations has been highlighted as a barrier to training, therefore there is a need to support access across Scotland, with more specialist provision. This is not currently available as it is low volume and can be costly to deliver. Developing and promoting a network of national traditional and specialist skills centres of excellence will go some way to address this.

Volunteers are crucial to some sub-sectors but tend to receive little or no training or support. There has been a relatively stable/growing volunteer workforce in recent years and this trend is set to continue.

Consideration should be given to developing accredited training that meets the needs of businesses and organisations operating in the sector.

7 Action plan

The action plan has been developed by the OPiT skills and expertise working group in partnership with industry and other stakeholders to address the key skills challenges facing the sector.

The overarching goal is to “ensure that the operation and growth of the historic environment is not constrained by a lack of suitable and appropriate talent and aims to:

- improve awareness and understanding of employment opportunities within the wider historic environment
- provide a shared understanding of the key skill issues which are, and will, impact on the historic environment
- provide a strategic skills framework around which all stakeholders will deliver resources
- ensure that all supporting sectors have a good understanding and awareness of the historic environment
- ensure that there is a range of skills development and training opportunities to meet the needs of individuals and employers operating in the sector

- promote equality and diversity in the sector
- act as a catalyst for increased delivery within related actions in construction, creative industries and tourism Skills Investment Plans.

To achieve this, three priority themes have been identified:

- 1. Engaging the sector in skills and innovation**
- 2. Attracting future talent and improving access**
- 3. Workforce development**

Each of the themes are detailed on the following pages, outlining actions, objectives, activities, lead and support organisations responsible for each action, the interim outcomes and longer-term impact of each action, and the SMART targets that will be used to monitor progress. The action plan within this SIP will build on the actions underway within the three existing SIPs, and will give sufficient prominence and visibility to the sector at all levels.

Theme 1: Engaging the sector in skills and innovation



Action	Objectives	Activities	Partners	Interim outcomes	Longer term impacts	SMART target
1.1 Improve awareness and understanding of skills challenges and solutions	Ensure all stakeholders have an awareness of, and an opportunity to, engage with the SIP	Develop and deliver long term communication plan	Lead: • Historic Environment Scotland	Increase in awareness of training and workforce development opportunities	Employers/ individuals can easily access up-to-date information about courses	5 meetings with key stakeholders to agree detailed actions and commitment (Apr 2019)
	Ensure that stakeholders & employers are aware of available skills development and training opportunities	Engage with ESP's Construction Strategy Group and inform the interactive map Long term visible engagement with construction, creative industries and tourism ILGs and skills groups	Support: • Skills Development Scotland • Museum Galleries Scotland • National Trust Scotland • Further education • Higher education • Energy Skills Partnership • Industry Leadership Groups	Key public and private sector stakeholders committed to sector wide approach	Increased influence / voice of sector with ILG & sector skills councils	Digital mapping available online (Oct 2019) Mapping reviewed on an annual basis (Oct 2019) Baseline established of training uptake (2019) and 5% increase in training uptake (2020) & reviewed annually
1.2 Widening employer engagement in skills	Ensure that stakeholders and employers are engaging staff in training addressing key skills gaps	Support existing employer work-force development initiatives for commercial skills: digital, leadership management, business, financial, budget planning, customer service, and marketing	Lead: • Historic Environment Scotland	Increase in uptake of training and workforce development	Public and private sector employers in the Historic Environment are more competitive	Baseline established of training uptake (2019) and 5% increase in training uptake. (2020) & reviewed annually
		Support existing employer work-force development initiatives for traditional and specialist skills Work with ESP's Construction Strategy Group to engage with industry and develop and deliver industry led programmes	Support: • Skills Development Scotland • Enterprise agencies • Museum Galleries Scotland • National Trust Scotland • Energy Skills Partnership • Traditional Building Forum	Increased staff commercial capability and awareness Increased staff specialist skills Support training providers, especially FE to develop skills to service these demands	5 meetings with key stakeholders to agree detailed actions and commitment (Apr 2019) Digital mapping available online (Oct 2019) Mapping reviewed on an annual basis (Oct 2019) Baseline established of training uptake (2019) and 5% increase in training uptake (2020) & reviewed annually	Undertake employer survey establishing baseline capability for commercial and specialist skills (Oct 2019)
1.3 Promoting innovation	Engage the sector through innovation to address future skills – driven by Industry 4.0, building standards, energy efficiency, climate change commitments	Complete a review of innovation best practice in the sector, opportunities with existing innovation centres and gap analysis Develop business case for extending Engine Shed scope to function as National Heritage & Technical Conservation Innovation Centre Engage with colleges and Innovation Centres (universities) via the College Innovation Working Group	Lead: • Historic Environment Scotland Support: • Innovation Centres • Universities • Colleges • Scottish Funding Council • Employers • Creative Media • Network Scotland	Increase number of companies involved in innovation and product development Employers have increased awareness of innovation best practice	Historic environment sector adopting more appropriate innovative practices Appropriate retrofitting of all pre-1919 buildings	Review of innovation best practice complete (Dec 2019) % increase in sector engagement with Innovation Centres and Engine Shed (Dec 2020)

Theme 2: Attracting future talent and improving access



Action	Objectives	Activities	Partners	Interim outcomes	Longer term impacts	SMART target
2.1 Promote the sector as an attractive place to work	<p>Promote sector as being open to all to attract diverse range of new talented people into the sector</p> <p>Increase its attractiveness as a career option</p> <p>Retain more people in Scotland</p> <p>Increase awareness of job roles/career opportunities</p>	<p>Engage with the existing work-based learning offer inc. Foundation Apprenticeships and future pathways in school</p> <p>Develop sector online profile using My World of Work to promote diversity of sector, multiple entry routes and opportunities</p> <p>Pilot New SCQF level 4/5 Construction Craft & Technician award with St Modans High School</p> <p>Establish working group to develop historic environment award at SCQF 6, with built environment & archaeology options</p> <p>Engage with Influencers and education sector through national CIAG offer</p> <p>Engage with Regional STEM Hub Partnerships to support the delivery of the national STEM strategy</p>	<p>Lead:</p> <ul style="list-style-type: none"> Skills Development Scotland <p>Support:</p> <ul style="list-style-type: none"> SQA Historic Environment Scotland Museum Galleries Scotland National Trust Scotland Education Scotland Parents Employers and private sector providers Schools Further education Higher education STEM ambassadors DYW regional groups Professionals institutions OPiT working groups College led STEM Hub Partnerships Traditional building forums Local Authority Education & Built Environment Services Historic Environment Scotland Conservation Area Regeneration Schemes and other grant supported initiatives to deliver this action 	<p>Increased understanding of historic environment with primary & secondary school pupils & teachers</p> <p>New My World of Work content and new case studies uploaded</p> <p>Increased delivery of CPD with careers advisers and guidance teachers</p> <p>Increased awareness amongst parents & influencers of opportunities within historic environment</p> <p>Pathways in the historic environment sector available from school</p>	<p>Greater awareness of sector and opportunities for all</p> <p>More diverse workforce including protected characteristics and all levels of study</p> <p>Sector embedded in CMS/CIAG services and school option choices</p>	<p>Eight students on course St Modans High School offered interviews for HES apprenticeships (2019)</p> <p>Accreditation from SQA and supported National rollout agreed (2020)</p> <p>6 new case studies (August 2019)</p> <p>10 CPD sessions run nationally (April 2020)</p>

Action	Objectives	Activities	Partners	Interim outcomes	Longer term impacts	SMART target
2.2 Promote pathways into the sector for all	<p>Promote sector as being open to all to attract diverse range of new talented people into the sector</p> <p>Promote apprenticeships and traditional academic routes by which new entrants and career changers</p> <p>Address balance of graduates/ non-graduate employment to meet employer demand</p>	<p>Develop and Provide works based learning & training programmes that will equip individuals for formal training</p> <p>Stakeholders and employers to recruit to and promote existing Foundation, Modern and Graduate Apprenticeship opportunities for all ages</p> <p>Develop suite of case studies different entry routes from school, FE, career changes including non-cognate degrees and internships</p> <p>Highlight diversity success and non-traditional entry routes</p>	<p>Lead:</p> <ul style="list-style-type: none"> Industry <p>Support:</p> <ul style="list-style-type: none"> Skills Development Scotland Historic Environment Scotland Further education Higher education Energy Skills Partnership Charitable sector SPS DWP BEM sector 	<p>Increased number of public and private sector employers offering apprenticeships</p> <p>Increased uptake of apprenticeships (FA, MA and GA) in sector</p> <p>Public Sector enabled to work collaboratively with each other, as well as private & charitable sectors</p>	<p>Employers able to recruit from wider talent pool</p> <p>Awareness of multiple routes of entry to sector</p> <p>Greater ethnic, gender and social diversity within the sector</p>	<p>20% increase in public and private sector employers with apprentices (Aug 2020)</p> <p>Contribute to Scottish Government Target of 30,000 MA/GA starts by 2021</p> <p>5% increase of Interns recruited by public sector employers (Aug 2019)</p> <p>6 Case studies with focus on diversity and other routes of entry published (Dec 2019)</p>

Theme 2: Attracting future talent and improving access continued

Action	Objectives	Activities	Partners	Interim outcomes	Longer term impacts	SMART target
2.3 Developing apprenticeships and enhancing further and higher education provision	Increase the number and type of apprentices in sector including higher-level apprenticeships (SCQF 7 and above)	Scope new Modern Apprenticeships and National Occupational Standards developments based on employer demand for Archaeology and other identified roles	Lead: • Skills Development Scotland and Scottish Funding Council	Increase the number of apprentices in sector	Increase understanding and preparedness for sector of apprentices and graduates	Demand for new Modern Apprenticeships and modules demonstrated through industry consultation (April 2019)
	Increase visibility and develop content of historic environment within undergraduate and postgraduate courses, including mandatory content	Develop new, innovative models of apprenticeship management, funding and delivery that address the constraints that SMEs in the sector face	Support: • Historic Environment Scotland • Museum Galleries Scotland • National Trust Scotland • Energy Skills Partnership • Local authorities • Sector Skills Councils	Increase the quality of the apprenticeships in the sector	Reduction in number of graduates requiring post-grad training or internships to be equipped for employment in the sector	Business case developed for Modern Apprenticeship development (Dec 2019)
	Parity of esteem for the 'vocational training'	Enable seamless transition from pre-apprenticeship to apprenticeships, through closer collaboration with 'feeder' programmes		Increase number of individuals completing 'bolt on' modules	Vocational content of all publicly funded training & education aligned with industrial needs of sector	6 sessions with graduates/apprentices delivered (September 2019)
		Review qualifications and pathways and recommend changes to meet industries current and future needs		Increase direct delivery of CPD and up-skilling to graduates and apprentices		New modules developed (June 2020)
		National 'train the trainers/lecturers' programme to highlight the skills needs of industry and assist FE & HE in delivering 'training'				
2.4 Develop volunteer networks for young people and offer work placements	Stimulate interest in sector with young people by promoting volunteering opportunities and offering work placements	Promote volunteering opportunities in schools	Lead: • Volunteer Scotland • Historic Environment Scotland	Increase number public and private sector employers offering volunteering and work placements	Volunteering networks expanded	Baseline established of volunteering provision & work placements (August 2019)
	Accredited award scheme identified and supported by the sector	Public and private sector employers to offer work placement opportunities to students in schools, FE & HE	Support: • Schools • Local authorities • Employers • DYW groups • OPiT volunteering working group	Increase number of individuals volunteering	Employers using volunteering as recruitment tool	20% increase in work placements /accredited volunteering by employers (Aug 2020)
		Review existing accredited award schemes				



Theme 3: Workforce development

Action	Objectives	Activities	Partners	Interim outcomes	Longer term impacts	SMART target
3.1 Expand traditional skills and specialist provision	Develop and promote a national traditional, specialist and craft skills hub and National Heritage & Technical Conservation Innovation Centre building – the Engine Shed	Establish industry led working groups including education and training partners to identify gaps in provision and develop business cases	Lead: • Scottish Funding Council	Increased understanding of demand for new provision	Increased access to specialist provision	Working group established (August 2019)
	Support a network of centres, delivering technical skills training, with public and charitable sector providers, and STSC, SCLT & FE colleges	Engage with existing and establish formal networks and introduce new accredited and quality assured provision in response to demand	Support: • Historic Environment Scotland • Further education • Higher education • Skills Development Scotland • SQA • Museum Galleries Scotland • National Trust Scotland • Private providers	Better coordination of activity	Shared knowledge between providers and provision responsive to employer's needs	Gaps in provision identified and response underway (Dec 2020)
				Ability to address specialist skills issues and market failure that current provision cannot		Gaps reviewed on bi-annual basis (2021)
				Establish International Centre of Innovation and Excellence, based on SCQF & SQA best practice		
3.2 Develop and enhance CPD provision and availability nationally	Develop and fund new CPD and train the trainer courses to address commercial and specialist demand	Industry led working groups including academic partners to create course content and/or adapt existing course modules to satisfy industries' need	Lead: • Historic Environment Scotland	Increased number of courses throughout Scotland	Current workforce becoming more skilled to meet changing needs of sector	Working group established to agree (August 2019)
	Increase availability and enable access	Working groups define content of different courses and which partners will be responsible for their delivery	Support: • Industry • Energy Skills Partnership • Museum Galleries Scotland • National Trust Scotland • Professional bodies • Private providers	Uptake in CPD courses	Companies can grow and respond to changing skills needs no matter their location.	Baseline established of training uptake (2019) and 5% increase in training uptake (2020) & reviewed annually
		Deliver training in different regions and for different skills issues		Reduced number of companies reporting skills gaps in existing workforce	Employees develop and maintain skills required for sector	Development of one new CPD course (April 2019) and expansion of existing provision to rural areas (August 2020)
				Employees develop and maintain required skills for the sector		
				Employees have access to a wider career pathway	Companies can source employees with the appropriate skills	
3.3 Increasing skills and qualifications of volunteers	Increase capability of volunteers through setting standards and skills benchmarks	Identify skills gaps in volunteering network	Lead: • Volunteer Scotland • SVCO	Volunteers achieving national standard of certification	Volunteers develop and maintain skills required for sector	Baseline established of volunteering training levels (2019) and 5% increase in training uptake (2020) & reviewed annually
			Support: • Schools • Local authorities • Employers • DYW groups	Appropriate training identified	Companies can source volunteers with the appropriate skills	Development of one new CPD course (December 2019) and expansion of existing provision to rural areas (August 2020)

Appendix A: Defining the historic environment sector



Table A.1: Historic environment SIC/SOC definition

SIC definition	SOC definitions
<ul style="list-style-type: none"> • Binding and related services • Construction of domestic buildings • Construction of other civil engineering projects n.e.c. • Demolition • Site preparation • Electrical installation • Plumbing, heat and air-conditioning installation • Other construction installation • Plastering • Joinery installation • Floor and wall covering • Painting • Glazing • Other building completion and finishing • Roofing activities • Scaffold erection • Specialised construction activities n.e.c. • Retail sale of antiques including antique books, in stores • Retail sale of books in specialised stores • Retail sale in commercial art galleries • Other holiday and other short-stay accommodation n.e.c. • Unlicensed restaurants and cafes • Video production activities • Letting and operating of conference/exhibition centres • Letting and operating of own or leased real estate n.e.c. • Architectural activities • Urban planning and landscape architectural activities • Engineering related scientific technical consulting • Other research natural sciences and engineering • Translation and interpretation activities • Environmental consulting activities • Other professional, scientific and technical activities • Travel agency activities • Tour operator activities • Activities of tourist guides • Building and industrial cleaning activities n.e.c. • Landscape service activities • Regulation activities incl cultural services etc. • Foreign affairs • Cultural education • Operation of arts facilities • Library activities • Archive activities • Museum activities • Operation of historical sites buildings visitor attractions • Botanical and zoological gardens and nature reserves • Repair of furniture and home furnishings • Repair of watches, clocks and jewellery • Repair of other personal and household goods 	<ul style="list-style-type: none"> • Professional occupations • Social and humanities scientists (archaeologists) • Conservation professionals • Environment professionals • Architects • Town planning officers • Quantity surveyors • Chartered surveyors • Construction project managers and related • Librarians • Archivists and curators • Associate professional and technical occupations • Architectural and town planning technicians • Draughtspersons • Authors, writers and translators • Arts officers, producers and directors • Photographers, AV broadcasting equipment operators • Conservation and environmental associate professionals • Administrative and secretarial occupations • Library clerks and assistants • Skilled trades occupations • Horticultural trades • Gardeners and landscape gardeners • Groundsmen and greenkeepers • Smiths and forge workers • Bricklayers and masons • Roofers, roof tilers and slaters • Plumbers and heating and ventilating engineers • Carpenters and joiners • Glaziers, window fabricators and fitters • Construction and building trades n.e.c. • Plasterers • Floorers and wall tilers • Painters and decorators • Construction and building trades supervisors • Glass and ceramics makers, decorators and finishers • Furniture makers and other craft woodworkers • Other skilled trades n.e.c. • Caring, leisure and other service occupations • Leisure and travel service occupations n.e.c. • Housekeepers and related occupations • Caretakers

Table A.2: Dilution factor

Dilution	Description
1%	Very limited
10%	A little
25%	Some
50%	Split
75%	Most
100%	All

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