

Mapping Future Archaeological Demand

A Methodology for Identifying Climate Change-Related
Infrastructure Projects in England

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1. Introduction

This report is an interim publication for a Historic England-funded project to identify and map ongoing and planned infrastructure projects associated with climate change adaptation and mitigation, and to explore the archaeological workforce requirements needed to support their delivery. While the immediate focus is archaeology, the project addresses a broader challenge faced across the heritage sector: the difficulty of identifying future demand in a systematic and evidence-based way.

The report therefore has two purposes.

- Firstly, it sets out an approach for identifying climate change-related infrastructure projects that are likely to generate future demand for archaeological services.
- Secondly, and more importantly, it presents a practical methodology for constructing forward-looking pipelines of work from multiple, fragmented data sources.

The methodology combines national infrastructure datasets, planning information, sector-specific databases and place-based intelligence to create a more comprehensive view of future activity than any single source can provide. Although developed in the context of archaeology and climate-related infrastructure, the approach is intentionally designed to be transferable. The same principles could be applied to other heritage specialisms, geographies or policy themes where there is a need to understand future workloads, anticipate skills needs and support strategic workforce planning.

A central finding of the work is that no single dataset provides a complete picture of future development activity. Information relating to current and planned projects is distributed across a wide range of national, regional and local sources. The methodology described in this report therefore adopts a layered approach, bringing these different sources together to create a more coherent and actionable picture of future demand.

Please note: this methodology is based on the findings of scoping research undertaken between January-July 2026.



2. Background

England is entering a period of significant investment in infrastructure associated with climate change adaptation, nature recovery and the transition to net zero. Renewable energy generation, flood and coastal management, habitat restoration, woodland creation and other environmental infrastructure projects are expected to form an increasingly important component of development activity over the coming decade. Archaeological expertise will play a critical role in enabling many of these projects to proceed, ensuring that the historic environment is appropriately understood, managed and protected.

For the archaeological sector, this presents both opportunities and challenges. While there is widespread recognition that climate change-related infrastructure will generate demand for archaeological services, there is currently limited visibility of the scale, location and timing of future work. Much of the evidence used to understand workforce requirements remains retrospective, focusing on current market conditions rather than future demand. As a result, the sector lacks robust methods for identifying emerging pipelines of work and for anticipating the workforce implications that may follow.

3. Infrastructure projects: main data sources considered

To map infrastructure projects in England that relate to climate change, it will be necessary to combine several sources that each capture a different part of the system. A multi-source, triangulated approach will be necessary as data on infrastructure projects is fragmentary; **no single database is complete**. The task will be to link forward-looking pipeline data, formal planning records, structured national datasets, and sector-specific sources. This approach will allow us to move from a partial view to a usable map of projects across different scales and stages.

The National Infrastructure and Service Transformation Authority (NISTA) [Infrastructure Pipeline](#) provides a starting point. This is a database of projects from public and private sectors that will be part of the Government's 10 Year Infrastructure Strategy. It identifies large projects that are planned or underway, often before they enter the planning system, categorised by project type (or 'sub-sector'), including energy, flood and coastal defence and water/wastewater. Access is public through a web interface and data can be downloaded in bulk. Coverage is limited to larger schemes (specifically, those anticipated to exceed £25m for energy and utilities projects) and excludes most local renewable projects. The dataset also lacks precise spatial boundaries, which limits its direct use in GIS.

The [Planning Inspectorate's](#) database of current applications relating to Nationally Significant Infrastructure Projects (NSIPs) in England and Wales provides a more detailed view of major infrastructure projects. Each project page includes documents, red line boundaries, and status updates. This makes it a high-quality source for large energy and grid schemes. While there is a facility for bulk download, the facility to download all project data in spreadsheet format does not capture all information contained on each project page. Some manual input of data may be necessary to augment the information available through bulk download. The main limitation, however, is scope: it excludes the majority of solar farms, battery storage sites, and smaller infrastructure.

The [planning.data.gov.uk](#) platform offers structured datasets that are easier to work with. The infrastructure project dataset includes standardised fields such as project type, geometry, and links to Planning Inspectorate records. This makes it suitable as a GIS backbone. Access is open and machine-readable via APIs or downloads. However, coverage is incomplete and largely mirrors NSIP-scale projects. The portal is also not yet comprehensive and it does not capture the volume of local applications that dominate climate-related development. The functionality of the platform is also limited: there is no bulk download option so data will need to be manually scraped and downloaded.

DESNZ's [Renewable Energy Planning Database](#) is a key thematic source. It contains data on all renewable electricity projects over 150kW coming through the planning system and includes fields such as capacity, technology type, and project status. This would enable identification of climate mitigation infrastructure more directly than in general planning datasets. Access is free, though formats vary. The main limitation is that it is sector-specific and does not include grid infrastructure, waste, or adaptation projects. It also relies on underlying planning data, so it may lag behind real-time applications.

Natural England's [Nature Recovery Projects](#) database adds an adaptation layer. This dataset defines the boundaries of 12 Nature Recovery Projects which are part of the 25 Year Environment Plan's commitment to deliver the Nature Recovery Network (NRN). They

include projects such as wetland creation and floodplain restoration. The datasets are open and available through downloads or map services. They are structured and suitable for GIS. However, they do not capture engineered infrastructure in detail and may not align neatly with planning datasets. The definition of 'project' can also differ, which complicates integration.

The most significant drawback with all five of the datasets listed above is that they don't offer comprehensive coverage of all types of infrastructure projects in scope of this research. While the national datasets listed above provide good coverage of renewable and clean energy projects, as well as larger-scale climate change adaptation projects (such as flood management, carbon capture, water infrastructure) and landscape-level nature recovery projects, their coverage of smaller-scale local projects (such as smaller nature recovery, woodland creation, solar and battery storage projects) is less comprehensive.

Local authority planning portals would be essential to fill this gap. They contain applications for most solar farms, battery storage sites, as well as smaller waste, flood and nature recovery schemes. Access is public but fragmented across hundreds of councils. There is no standard interface, and bulk access is not available. To use this source at scale, it will be necessary to rely on targeted searches, scraping tools, or third-party aggregators. Data quality and consistency vary, and project classification is often unclear. This makes systematic extraction time-consuming.

[UK PlanIt](#) provides a partial solution by aggregating planning applications from multiple authorities. It allows keyword searches across regions and can help identify clusters of activity. Its principal drawback for this research, however, is that it does not contain information on the contents of planning applications. Instead, it aggregates and quantifies the number of planning applications in each local authority area, meaning that it does not provide information on types of projects. UK PlanIt is therefore best used as a discovery tool rather than a primary dataset. Coverage is also uneven, and results depend heavily on search terms.

[Glenigan](#)¹ provides a commercial alternative that addresses many of these gaps. It aggregates planning and construction data into a structured, searchable database. It includes project pipelines, stages, values, and sector classifications, including energy and utilities. Payment is required to access the data and it typically requires a subscription. The advantage is consistency and scale, as well as reduced need for scraping. Apparent limitations are cost and transparency in how data is compiled. It may also require licensing agreements for data export and integration.

When combined, these sources form a layered model. The NISTA pipeline shows what is planned at a national level. The Planning Inspectorate and [planning.data.gov.uk](#) provide structured information on major projects. The renewable energy database and Natural England datasets identify climate-specific activity.

¹ Glenigan does not publish costs, as it is bespoke and tailored to each enquiry.



The main constraint is integration. These datasets differ in format, coverage, and definitions. It is therefore recommended that a staged approach is adopted as the optimum way forward, beginning with structured national datasets, then adding sector-specific layers and, finally, expanding coverage through local planning data. A fuller overview of our approach to integrating and amalgamating data from these data sources is included in section 6.

4. Infrastructure projects: other data sources considered

A range of other datasets were also considered but ultimately excluded primarily due to insufficient scope and coverage:

- Forest Research, [New Planting and Restocking, UK, 1971 to 2025](#). This dataset contains data on new plantings in England by tree type. The data in this dataset is, however, quite limited, showing only the total amount (in thousands of hectares) of new trees planted in England by year. This dataset does not provide a readily usable database of current or planned woodland creation projects.
- DEFRA's [Biodiversity Gains Site Register](#). This is a list of all sites in England which are contributing to biodiversity gain. The BNG register is not a downloadable spreadsheet of projects; it's a searchable online register of sites and so does not provide data on climate change-related infrastructure projects.
- The National Audit Office's [Flood Risk Tool: Flood Defences by Region](#) provides data on the number of flood defences in each LPA area. The dataset, therefore, provides a count of current flood defence infrastructure; it does not give information on current or planned flood defence projects.
- [Shoreline Management Plans](#) (SMPs): There are 22 SMPs, each developed between 2006 and 2012. Each SMP sets out a strategy for coastal management covering the next 100 years, divided into three epochs (Epoch 1: 0-20 years; Epoch 2: 20-50 years; Epoch 3: 50-100 years). While 2025 marks the end of Epoch 1 and the beginning of Epoch 2, the end of Epoch 1 has not triggered the publication of a new batch of SMPs. Instead, in 2023 DEFRA undertook an independent peer review which made a series of recommendations to help strengthen the existing SMPs across England.² The SMPs from 2006-2012 are therefore still in place. Each SMP also contains a list of actions (in CSV spreadsheet form), but these actions are not all projects (actions include strategic studies; consultations etc.). Therefore, the SMPs, while providing useful contextual information, do not offer a readily usable database of current or planned coastal defence projects.
- Local planning authority [Local Plans](#): All LPAs are currently going through a process of updating their Local Plans. However, these documents set out planning policies; they don't provide a readily usable database of planned projects.

² Environment Agency (2024) 'Shoreline management plans independent peer review': <https://www.gov.uk/government/publications/shoreline-management-plans-independent-peer-review/shoreline-management-plans-independent-peer-review#executive-summary>

5. Local authority planning portals

5.1 Moderated approaches

The multi-layer, multi-source model outlined above ultimately depends on a staged approach in which data from national datasets is supplemented by data gathered through searches of local authority planning portals. However, since it is not feasible to search through all 317 local authority planning portals in England, a moderated approach will need to be used. The following three approaches were considered:

- The most significant limitation with **data scraping** approaches is that they often create issues around data quality. This is primarily due to differences in the formatting of data across different websites, leading to problems such as inconsistencies, encoding differences and missing values in data derived from scraping approaches.³ These problems will be particularly acute if applied in this context, as the consistency and formatting of data varies considerably between different local authority planning portals. Furthermore, many local authority planning portals likely use anti-bot and CAPTCHA defences which undermine scraping tools. Scraping tools are therefore unlikely to provide data of sufficient quality and integrity for the purpose of this research.
- Conversely, while **third-party aggregators** may offer a solution to managing the large volume of data across all local planning authorities, it is unlikely that such aggregators will offer the depth of information required for this work. As mentioned above, UK PlanIt, for instance, quantifies the number of planning applications in each local authority area, but provides limited information on the types of projects. Both scraping and third-party aggregators, therefore, have drawbacks which make them unsuitable for this research project.
- For these reasons, it is recommended that a **manual sampling approach** should be employed, rather than bespoke scraping exercises or third-part aggregators.

5.2 Sampling strategy

A stratified sample of 30 local authority planning portals is proposed. A sample of 30 represents approximately 10% of all planning authorities in England. Manual searches of 30 local planning portals are also achievable within the budget and timescales of the research.

The proposed sample is stratified by region, with sample sizes calculated in proportion to the number of local authorities in each of the 9 English regions (

³ <https://dev.to/agenthustler/data-quality-in-web-scraping-validation-cleaning-and-deduplication-502k>



Table 1).

Table 1: Local authority planning portal: sampling approach

Region	Number of LPAs ⁴	Sample size
East Midlands	39	4
East of England	50	5
London	33	3
North East	12	1
North West	36	4
South East	69	5
South West	30	3
West Midlands	33	3
Yorkshire and the Humber	15	2
Total	317	30

Based on this sample, local planning authorities have been selected at random, with a mix of local authority types (district councils, county councils, city and metropolitan councils). In each regional sample, a local authority located on the coast was purposefully selected, to ensure that marine and offshore projects would be included.

To this sample of 30 were then added the planning portals for all 10 of the national park authorities in England, taking the total sample to 40. The rationale for including all 10 national park authorities is that the national parks are likely to accommodate a large number of England's nature recovery projects, which otherwise may not be captured.

A breakdown of the full sample of local planning authorities is included in Appendix 1: Local planning portal sampling – full sample.

5.3 Search strategy

Once a sample of local planning authorities was determined, the next stage was to devise a consistent and repeatable approach to searching each of the sampled planning portals.

The search functions on most local authority planning portals have a similar structure, with simple and advanced search facilities and functions for keyword searches. Within the advanced search, there are also filters which can limit the search results by application type (e.g., Full Planning Permission, Outline Planning Permission, Listed Building Consent), status (e.g., decided, awaiting decision), decision (e.g., approved, deferred, refused) and area (ward or parish). There are also functions for setting date range parameters.

Each of the sampled local authority planning portals will be searched using keywords to identify current or planned climate change-related infrastructure projects at the local

⁴ The source for the breakdown of LPAs by region was: MHCLG (2025) 'Local Authority Planning Capacity and Capability Survey 2025': <https://www.gov.uk/government/publications/local-authority-planning-capacity-and-capability-survey-2025/local-authority-planning-capacity-and-capability-survey-2025#methodology>

authority level. Search terms have been devised based on the types of infrastructure projects for which there is likely to be gaps in the national datasets. These include:

- Local nature recovery projects (i.e., smaller, local-level projects, in addition to the 12 landscape-scale projects listed in the Natural England dataset);
- Forest and woodland creation projects and tree planting;
- Local flood defence projects;
- Smaller solar farms;
- Battery storage schemes.

Based on these kinds of projects, the following search terms have been proposed for searches of local authority planning portals (Table 2).

Table 2: Local authority planning portal: search terms

Nature Recovery	Climate adaptation	Woodland creation	Solar farms	Battery storage
Nature Habitat Biodiversity Wildlife	Flood defence	Woodland Forest	Solar	Battery

To ensure that searches focus on the most relevant projects, searches will be based on those projects for which full planning permission is being sought. This will be achieved by selecting ‘Full Planning Permission’ in the Application Type drop-down filter, in the advanced search. This will help to keep the searches of the 40 planning portals focused and manageable.

As this research project is concerned with ongoing and planned projects (including those in the pre-application stage), it is recommended that filters should not be applied to the Status or Decision drop-down filters. This to ensure that searches capture both projects for which planning permission has been granted (i.e., those which have been decided) as well as those for which a decision is outstanding. Projects for which planning applications have been withdrawn or rejected will be screened out and manually removed from the search results.

It is also recommended that date parameters be set for searches, to filter out old and completed projects (e.g. all infrastructure projects that have started within the last two years). Searches should therefore be limited to projects for which application was being sought from June 2024. Results will be screened to remove duplicate projects as well as any projects for which planning permission was rejected, or the application withdrawn.

In addition to searches of local planning portals, supplementary information about planned nature recovery projects and coastal management projects, for each sampled local authority, will be sought through a review of relevant [Local Nature Recovery Strategies](#) (LNRs) and [Shoreline Management Plans](#) (SMPs).

While SMPs have been discounted as an authoritative data source for projects, they are likely to provide important contextual information about coastal management projects. Similarly, England’s LNRs – which set out priorities and actions for nature and biodiversity

recovery in their respective areas – provide important information about potential future nature recovery projects. A review of the relevant LNRS and SMP, for each sampled LPA, will therefore supplement data recovered through searches of local planning portals.

6. Amalgamating data from multiple sources

The sections above set out the data sources to be consulted and the processes for searching them. The next stage will be to combine and amalgamate data from the different sources into a single, comprehensive master database of all current and planned climate change infrastructure projects covering the next 10 years.

A multi-layered and staged approach will be used, starting with the national datasets and supplementing with data from the sector-specific databases and searches of planning portals. Broadly conceived, the staged strategy will proceed as follows:

1. Stage 1: Bulk-download, refine and amalgamate data from the two principal national databases of infrastructure projects: The Planning Inspectorate and NISTA.
2. Stage 2: Add in data on clean energy and nature recovery projects from the sector-specific databases, specifically: DESNZ's Renewable Energy Planning Database and Natural England's database of Nature Recovery Projects.
3. Stage 3: Add in data on local-level climate change-related infrastructure projects obtained from searches of the local planning portals.

6.1 Refinement and integration of national datasets

The first step will be to refine the national datasets so that they contain only projects relating to climate change adaptation and mitigation in England. Both the Planning Inspectorate and NISTA data contain information on all types of infrastructure projects (not solely those relating to climate change). They also cover a wider geographic range than just England.⁵

Refinement of the data will be achieved firstly by filtering out all projects not in England, using the data field 'region'. After this, data should then be filtered to focus only on projects relating to climate change. In the case of the Planning Inspectorate data, the filter should be applied to the data field 'Application type', with project categories most relevant to climate change mitigation selected. These will most likely be:

- EN01: Generating Stations (includes wind farms/renewable energy)
- EN07: Other pipelines (includes carbon capture and hydrogen)
- WA01: Dams and reservoirs
- WA02: Transfer of Water Resources
- WS01: Hazardous Waste Facilities
- WS02: Waste water treatment facilities

⁵ The Planning Inspectorate data includes projects in both England and Wales. NISTA covers projects across the whole of the UK

Thus, projects relating to transport, storage and distribution, gas generation and storage and electric lines will be filtered out as they are not related to climate change adaptation or mitigation. Once these filters are applied, information contained in the data field 'description' will then be reviewed to decide which projects within the in-scope categories are actually related to climate change adaptation. For instance, the category 'Generating stations' includes a range of projects which are in scope (such as clean energy projects like wind farms), but also a large number of projects not relating to climate change mitigation, such as coal and gas-fired power stations.

A similar approach will then be applied to refining the NISTA data. In the NISTA data, the filter should be applied to the data field 'sub-sector', with project categories most relevant to climate change selected. These are likely to be:

- Electricity Generation - Other
- Energy - Carbon Capture and Storage
- Energy - Other
- Energy - Solar
- Energy - Tidal/wave
- Energy - Wind offshore
- Energy - Wind onshore
- Flood/Coastal Defence
- Water/Wastewater

Once these filters are applied, the 'project description' data field will then be reviewed to decide which projects within the in-scope categories are actually related to climate change adaptation.

Once the two national datasets are refined, they can then be combined. This process will involve selecting which data fields, from the two datasets, should be isolated and extracted to be combined. Based on the outcome of an initial, high-level mapping of the data fields from the two datasets, the following data fields have been proposed for extraction and amalgamation (

Table 3).

Table 3: Data fields from Planning Inspectorate and NISTA datasets to be extracted and included in amalgamated master database of projects

Planning Inspectorate	NISTA	Brief description of data field
Project Name	Project Name	The name of the project
Applicant Name	Key Client	The organisation undertaking the project

Application Type	Sub-Sector	The type of project
Region	ONS Region	Region in which project is located
Stage	Scheme Status	Project stage in planning pipeline or construction timetable
Description	Project Description	Description of the project
Date application accepted	-	The date the planning application for the project was accepted
Date of decision	-	Planning decision date
-	Start of works	The date the works started or are scheduled to start
-	Date in service	The date the project is scheduled to be operational

The full mapping exercise is included in Appendix 2: Data field mapping.

The main compatibility issue between the two databases is the fact that the Planning Inspectorate data relates to projects for which applications are being sought (i.e., planned projects), whereas the NISTA data relates to current projects and projects which are guaranteed to go ahead as part of the infrastructure pipeline. The two datasets therefore contain different kinds of data about project timelines:

- the former contains data on **projects' stages** in the planning pipeline;
- the latter contains data on **when work started or is scheduled to start**.

This means that the amalgamated dataset will need to contain different kinds of data on project timelines: the planned projects from the Planning Inspectorate will have data on key planning decision dates (e.g., date application accepted; decision date); the current and future projects from NISTA will have data on anticipated timescales including when works are anticipated to begin.

The other issue is the fact that the two datasets use slightly different categories for describing and classifying project types. For instance, where the Planning Inspectorate database uses the category 'Generating stations', within the data field 'Application Type', NISTA have several different categories of energy projects, within the data field 'sub-sector'. This means that retrospective coding will be necessary when combining the two datasets to ensure that project categories are applied consistently across the two datasets.

6.2 Integration of data from sector-specific databases

Once the data from the Planning Inspectorate and NISTA are fully amalgamated, the next step will be to integrate data from the two sector-specific databases: DESNZ's Renewable Energy Planning Database and Natural England's database of Nature Recovery Projects.

As with NISTA and the Planning Inspectorate, the DESNZ database will require some refinement. Data on projects not in England should be filtered out, using the 'Country' data field, as well as projects for which planning applications were either refused or withdrawn, using the 'Development Status' data field. A filter should also be applied to the 'Planning application submitted' data field to focus only on projects after April 2024. Finally, filtering will also need to be applied to the 'Technology' data field. The DESNZ dataset contains information about a broad range of clean energy technologies and it will be necessary to consider whether all technology types in this database would be in scope (e.g., fly wheel, hot dry rocks (HDRs)).

Once refined, relevant fields of the DESNZ data can then be imported into the master spreadsheet containing the amalgamated data from the Planning Inspectorate and NISTA. Based on the initial, high-level mapping exercise, the following data fields have been selected to be extracted from the DESNZ dataset and imported into the combined master spreadsheet (Table 4).

Table 4: Data fields from DESNZ dataset to be extracted and included in amalgamated master database of projects, alongside corresponding data fields from the Planning Inspectorate and NISTA

Planning Inspectorate	NISTA	DESNZ
Project Name	Project Name	Site Name
Applicant Name	Key Client	Operator (or Applicant)
Application Type	Sub-Sector	-
Region	ONS Region	Region
Stage	Scheme Status	Development Status
Description	Project Description	-
Date application accepted	-	Planning application Submitted
Date of decision	-	-
-	Start of works	-
-	Date in service	-

When importing data from the Renewable Energy Planning Database, it will be necessary to retrospectively code the project types, according to the agreed project type categories used for the combined Planning Inspectorate and NISTA data. This is because the DESNZ dataset does not categorise projects according to project-type in the way that the Planning Inspectorate and NISTA datasets do; instead, projects are categorised according to technology type used.

The same process will also be followed for the Natural England dataset on Nature Recovery Projects. This dataset is, however, considerably smaller, so presents fewer challenges in terms of refinement and amalgamation.

6.3 Integration of data on local-level projects obtained from searches of planning portals

The final stage will then be to amalgamate all of the project data downloaded from the local authority planning portals.

Data from searches of all 40 portals will first need to be manually downloaded and collated in a single spreadsheet documenting all local-level projects. This will then need to be manually screened to remove all duplicate projects (multiple searches of the same planning portal, using different search terms, may result in the same project discovered through different searches) as well as projects which were withdrawn or for which planning permission was refused.

Once the local authority-level data is screened, it can then be imported into the combined master spreadsheet containing data from the national and sector-specific databases. The principal challenge with amalgamating the local authority data relates to formatting. Data downloaded from the planning portals is formatted as a single column which contains a brief project description as well as information on location, project status and a link to project documents. **All of the information contained in this single column, for each project, will need to be manually transposed to populate the relevant data fields in the master spreadsheet.** This time-consuming task of data transposition is arguably one of the greatest constraints when using data obtained from planning portals.

The outcome of this three-stage process of data amalgamation will be the creation of a bespoke, comprehensive database containing information on all current and planned infrastructure projects – relating to climate change adaptation and mitigation – covering the next 10 years.

7. Conclusions: Towards a more strategic approach to workforce planning

The increasing scale of investment in climate change adaptation, nature recovery and net-zero infrastructure is likely to have significant implications for archaeology over the coming decade. Understanding those implications requires more than an assessment of current activity; it requires the ability to identify and analyse future pipelines of work before projects reach delivery stage.

This report has presented a methodology for doing so. Developed as part of a project focused on future archaeological demand arising from climate change-related infrastructure, the approach demonstrates how disparate datasets can be combined to create a more comprehensive picture of future activity than is possible through reliance on any single source.

Importantly, the significance of the methodology extends beyond archaeology and beyond the specific subject matter of this project. The core challenge addressed here – the absence of reliable intelligence on future demand – is shared across many parts of the heritage sector. Whether the focus is heritage construction, conservation, marine heritage, planning advice, specialist crafts, visitor infrastructure or place-based regeneration, strategic workforce planning depends on understanding what work is likely to emerge, where it will occur and when it will be delivered.

The principal contribution of this report is therefore not simply the creation of a pipeline of climate change-related infrastructure projects. Rather, it is the development of a repeatable, transparent and scalable methodology that can be adapted to identify future pipelines of work in a wide range of heritage contexts. By bringing together national datasets, sector-specific intelligence, planning information and local sources, heritage organisations can move from retrospective analysis towards a more anticipatory and evidence-led understanding of future demand.

For archaeology, this methodology provides a foundation for future workforce forecasting and skills planning. More broadly, it offers a framework through which the heritage sector can strengthen its ability to anticipate change, align skills and capacity with future needs, and make better-informed decisions about investment, recruitment and workforce development. In that sense, the approach described in this report should be viewed not simply as a project methodology, but as a model for building the intelligence needed to support long-term strategic planning across the heritage sector.

Appendix 1: Local planning portal sampling – full sample

Table 5: Sampled local planning authorities (LPAs)

Region	LPAs total	Sample (10%)	Sampled LPAs	Relevant Local Nature Recovery Strategy (LNRS)	Relevant Shoreline Management Plan (SMP)
East Midlands	39	4	East Lindsay District Council	Greater Lincolnshire LNRS	Flamborough Head to Gibraltar Point SMP3
			Derbyshire County Council	Derbyshire LNRS	N/A
			Nottingham City Council	Nottinghamshire and Nottingham LNRS	N/A
			South Kesteven District Council	Greater Lincolnshire LNRS	N/A
East of England	50	5	North Norfolk District Council	Norfolk County Council LNRS	Kelling Hard to Lowestoft SMP6
			East Suffolk Council	Suffolk County Council LNRS	Lowestoft to Felixstowe SMP7
			Cambridgeshire County Council	Cambridgeshire and Peterborough LNRS	N/A
			Norwich City Council	Norfolk County Council LNRS	N/A
			Peterborough City Council	Cambridgeshire and Peterborough LNRS	N/A
London	33	3	Tower Hamlets Borough Council	London LNRS	N/A
			Bexley Borough Council	London LNRS	N/A
			Ealing Borough Council	London LNRS	N/A
North East	12	1	Northumberland Council	North of Tyne LNRS	Scottish Border to the River Tyne SMP1
North West	36	4	Cumberland Council	Cumbria LNRS	Great Ormes Head to Scotland SMP22
			Lancashire County Council	Lancashire County Council LNRS	N/A
			Liverpool City Council	Liverpool LNRS	N/A
			Pendle Borough Council	Lancashire County Council LNRS	N/A
South East	69	5	Dover District Council	Kent and Medway LNRA	Isle of Grain to South Foreland SMP10

			Isle of Wight Council	Isle of Wight LNRS	Isle of Wight SMP14
			Portsmouth City Council	Hampshire LNRS	Selsey Bill to Hurst Spit SMP13
			Hampshire County Council	Hampshire LNRS	Selsey Bill to Hurst Spit SMP13
			Waverley Borough Council	Surrey County Council LNRS	N/A
South West	30	3	Cornwall Council	Cornwall and Isles of Scilly LNRS	Rame Head to Hartland Point SMP17
			North Devon District Council	Devon LNRS	Hartland Point to Anchor Head SMP18
			Gloucester City Council	Gloucestershire LNRS	N/A
West Midlands	33	3	Shropshire Council	Shropshire and Telford & Wrekin LNRS	N/A
			Staffordshire County Council	Staffordshire and Stoke LNRS	N/A
			Solihull Borough Council	West Midlands LNRS	N/A
Yorkshire and Humber	12	2	North Yorkshire Council	North Yorkshire LNRS	The Tyne to Flamborough Head SMP2
			North Lincolnshire Council	Greater Lincolnshire LNRS	N/A

Full list of national park authorities:

- Peak District
- Norfolk Broads
- Northumberland National Park
- Lake District
- New Forest
- South Downs
- Dartmoor
- Exmoor
- North York Moors
- Yorkshire Dales

Appendix 2: Data field mapping

Table 6: Fields contained in main data sources

Planning Inspectorate	NISTA	DESNZ
Project reference	Project ID	Ref ID
Project name	Project Name	Site Name
Applicant name	Key client	Operator (or applicant)
Application type	Sub-sector	Technology type
-	Sector	-
Region	ONS region	Region
Location	-	Address
Grid reference - Easting	-	X-coordinate
Grid reference - Northing:	-	Y-coordinate
GPS co-ordinates	-	-
Stage	Scheme Status	Development status
Description	Project description	-
Anticipated submission period	-	-
Date of application	-	Planning Application Submitted
Date application accepted	-	-
Date Examination started	-	-
Examining Authority's anticipated close of examination	-	-
Date Examination closed	-	-
Date of recommendation	-	-
Date of decision	-	-
Date withdrawn	-	Planning Application Withdrawn
-	Data provider	-

-	10 years forward look capital cost (£m - 2024/25 prices)	-
-	Whole life cost (capital and resource) (£m - 2024/25 prices)(for GMPP projects only)	-
-	Local authority	Planning Authority
-	Start of works	-
-	Date in service	-
-	2025/6 Cost profile	-
-	2026/7 Cost profile	-
-	2027/8 Cost profile	-
-	2028/9 Cost profile	-
-	2029/30 Cost profile	-
-	2030/31 Cost profile	-
-	2031/32 Cost profile	-
-	2032/33 Cost profile	-
-	2033/34 Cost profile	-
-	2034/35 Cost profile	-
-	Public Notes	-
-	Public identifier	-
-	Parent Ids	-
-	Funding Status	-
-	Total capital cost - new capital + maintenance and renewals (£m - 2024/25 prices)	-
-	Total capital maintenance and renewals cost (£m - 2024/25 prices)	-
-	Source of financing	-
-	Procurement stage	-
-	Costs accounted for in parent project?	-

-	Approval pathway	-
-	revenue model	-
-	procurement/investment framework	-
-	support from public finance institution	-
-	opportunities for additional private finance?	-
-	Amount of private investment?	-
-	Procurement contact	-
-	Investor contact	-