OXFORDSHIRE COUNTY COUNCIL

Oxfordshire's Historic Landscape Characterisation

STAGE 2 COMPLETION REPORT

Date: 23rd December 2016

Author: Abi Tompkins

Period Covered: 23rd February 2013 – 5th December 2016

1.0 Project Overview

This report describes the progress made in Stage Two of the Historic Landscape Characterisation (HLC) for Oxfordshire.

Historic England has supported a national programme of Historic Landscape Characterisation projects over the past two decades. For the most part they have been undertaken by County Council based Historic Environment Services, covering individual Counties or similar sized units. They aim to achieve an archaeologist's understanding of the historic and cultural origins and development of the present day landscape through a desk-based programme of digital mapping, description and analysis, and by the identification of the physical remains visible within the landscape that demonstrate the processes by which it has reached its present form.

Like the other members of the family of landscape characterisation studies to which it belongs, HLC provides a broad-brush overview of complex aspects of the historic environment in order to provide new and wide-ranging information for conservation, management and development decisions. The objectives of HLC are to promote better management and understanding of the historic landscape resource and of the accommodation of continued change within it, and to establish an integrated approach to its sustainable management in partnership with other organisations.

The basis of HLC is a Geographic Information System (GIS). The information within the GIS is structured by the identification and classification of archaeological, historical and other environmental attributes of land parcels. Unlike other forms of landscape assessment, HLC permits the creation of a plurality of classifications of historic landscape types. The distribution of landscape types can be mapped using GIS, with each type being supported by written descriptions of these types and the particular process of landscape formation that they represent. This approach to HLC may be used to inform a wide range of planning, conservation and management initiatives and strategies.

In the initial data collection stage of HLC, GIS polygons were defined based on groups of modern land parcels exhibiting similar historic origins or processes. Each polygon was assigned to one of a set of pre-determined high-level Broad Types, which were then subdivided and refined according to a range of attributes and assigned an HLC Type. The HBSMR database HLC module was used to record all the attributes reflecting the historic landscape features specific to each polygon (such as aspects of field pattern and boundary form, woodland cover, evidence for former land-use).

2.0 Stage 2 Objectives and Outcomes

2.1 Objectives

2.1.1 To create GIS polygons which define modern landscape units with similar Historic Character
2.1.2 To record attribute date for each polygon in order to assign a HLC Type
2.1.3 To integrate data from HLC datasets created by the Cotswolds, North Wessex Downs, and Chilterns AONBs
2.1.4 To integrate data from the HLC dataset created by Oxford City Council
2.1.5 To record and illustrate different HLC Types using photographs
2.1.6 To create a thematic map which shows Broad and HLC Types across the County
2.1.7 To disseminate results and project progress to Stakeholder and Consultation Groups
2.1.8 To create a Stage 2 Final Report for inclusion with the Project Archive
2.1.9 To update Project Design for inclusion with the Project Archive
2.1.10 To create Highlight Reports for inclusion with the Project Archive and to satisfy Project Management requirements
2.1.11 To assess the potential for HLC development and use

2.2 Outcomes

2.2.1 GIS Polygons

	County Only	City	Combined
Hectares	255,528	4,578	260,106
Polygons	12,849	3,253	16,102
Mean Area of Polygons	19.89	1.41	16.16

Table 1: Number of polygons and hectares covered

In total, 16,102 polygons have been created, covering an area of 260,106 hectares. These polygons have been characterised into 15 Broad Types and 109 HLC Types. Table 1 shows how, despite covering less than 2% of the county, the City of Oxford represents approximately 20% of the total number of polygons. This is due to the smaller average size of polygons in the city, created by an earlier HLC Project – Oxford HLC. The grain of characterisation is, therefore, not consistent across the whole of Oxfordshire, a factor which affects the ability to analyse this data. It was decided that the fine grain of the Oxford HLC would be preserved as any amalgamation would lose the level of detail recorded by the city, prevent users from referring back to the Oxford HLC, and create difficulties when trying to assign previous types (see below for further discussion on the integration of the city's data).

Oxfordshire is predominantly a rural county, as demonstrated by Figure 1. Almost 74% of the landscape is comprised of enclosures, and rural settlements – villages and hamlets – cover a larger area than the combined urban centres. Although woodland only covers 6.7% of the county, it is the second largest category and represents the second most common landscape character type. The built environment – Civic Amenities, Civil Provision, Commercial, Communication, Military, Urban and Rural Settlement, Recreation, and Industry – covers 15.2% of the county. This emphasises the overwhelmingly agrarian character of Oxfordshire.

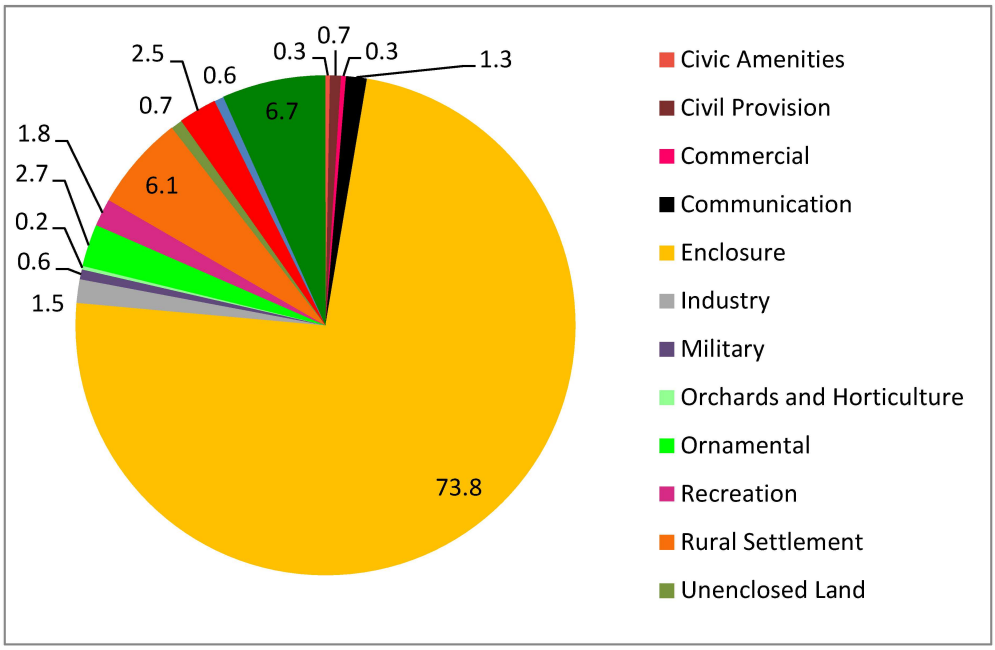


Figure 1: The percentage of Oxfordshire covered by each Broad Type

2.2.2 Attribute data

Polygons were defined by grouping together features with shared current and previous attributes. These were recorded in an HBSMR database and an example record is shown in Figure 2. Using this data it is possible to map and analyse different attributes. For example: broad and HLC types, period, or previous type.

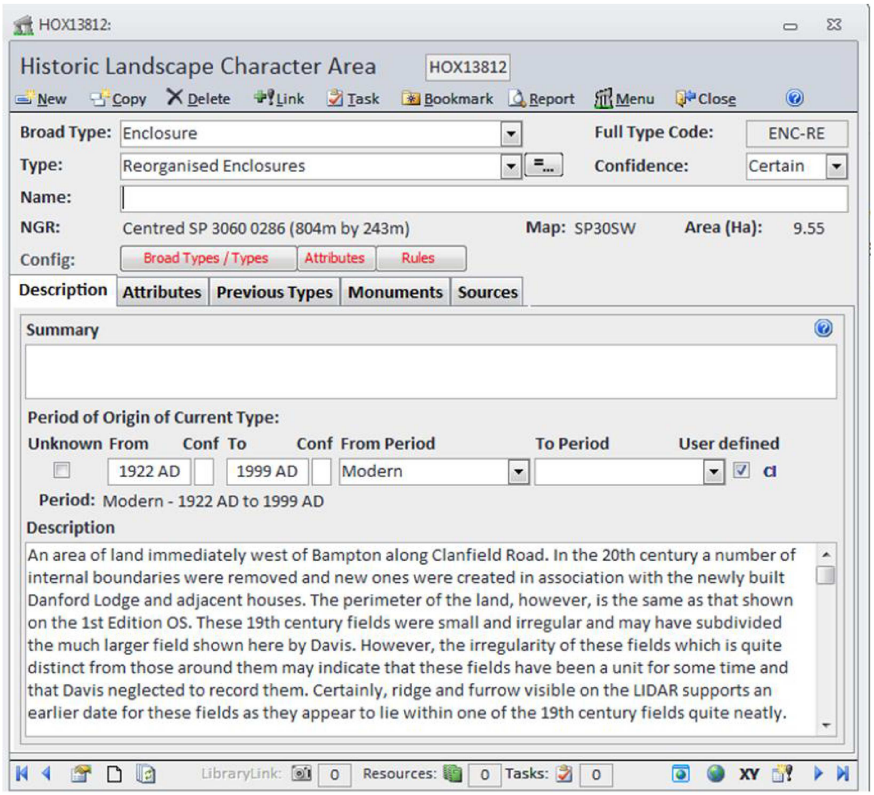


Figure 2: Example HBSMR Record

Figure 3, shows this in action and maps those parts of the landscape where the current HLC Type dates from the medieval period. This includes Middleton Park and villages such as Wendlebury and Ardley.

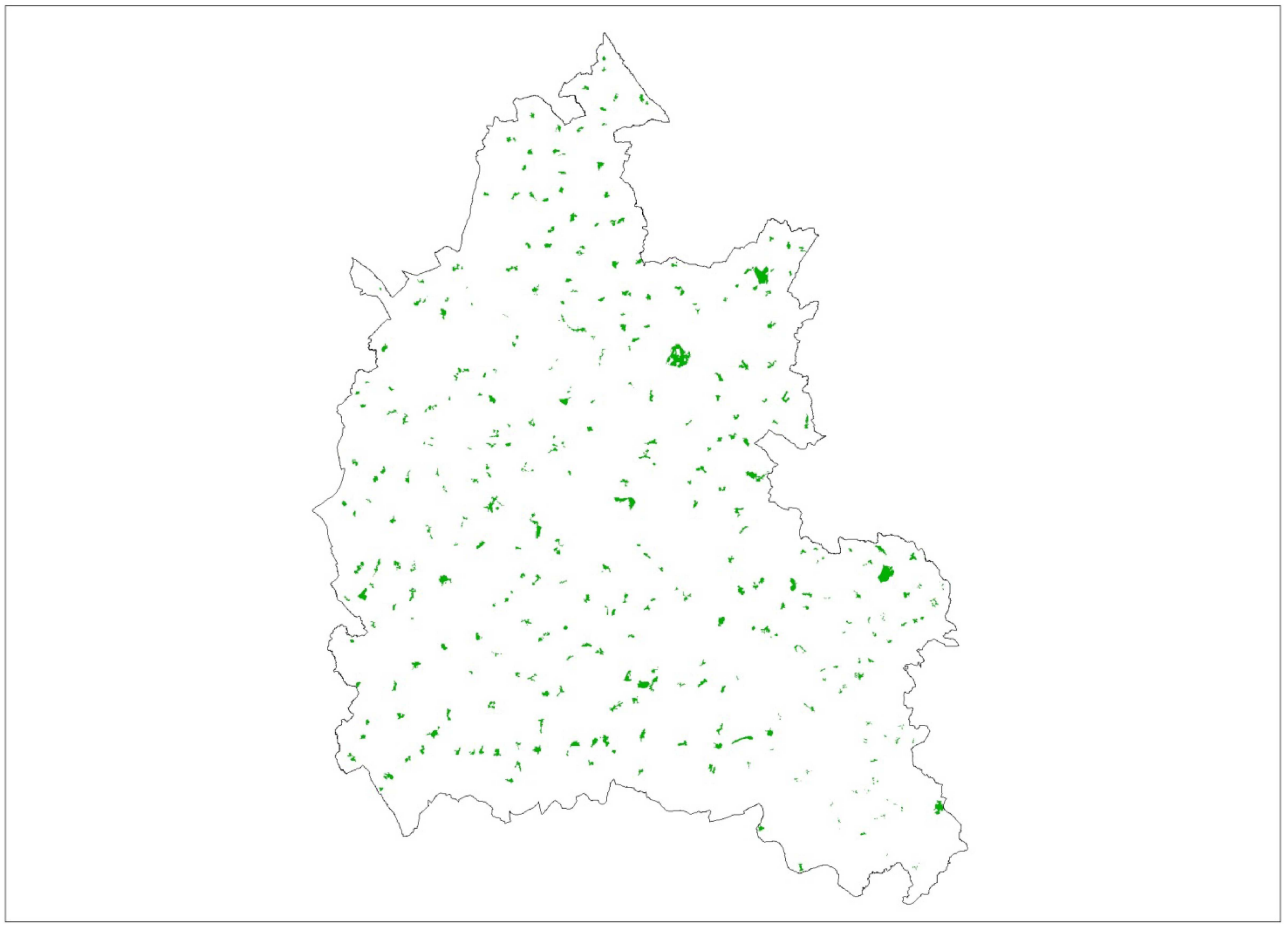


Figure 3: Those parts of Oxfordshire where the current HLC type dates from the medieval period.

2.2.3 Integration of AONBs

This was completed by Charlotte Malone using two methodologies. The first was used in the Chilterns and North Wessex Downs AONBs and involved the integration of earlier HLC data into this project. In the main, polygons created by the two AONB HLCs were maintained, although some amalgamation was necessary due to the minimum size requirements of this project. Data from the AONBs was inputted manually into HBSMR and, where necessary, reclassified to use the same terminology and character types as the Oxon HLC (a concordance table will be included with the final project archive). In places, it was possible to record an additional level of detail as the 3rd Edition OS maps have been used by this project. A reference to the original AONB HLC projects was recorded for each polygon created in this way. The second methodology related to the Cotswolds AONB. Given the age of this project and the different methods used for recording, it was thought prudent to consider this part of Oxfordshire afresh. As such, this area is covered by the general methodology.

2.2.4 Integration of City

A third methodology was used to integrate data from the Oxford HLC, completed in 2010. It was not possible to use the integration technique used for the Chilterns and the North Wessex Downs and there was insufficient time to digitise the city from scratch, as had been done in the Cotswolds AONB. Furthermore, it was recognised that it was not desirable to lose the high level of detail recorded by the Oxford HLC, as would be expected if the digitisation was done again. As such, a

compromise was reached whereby the Oxfordshire and the Oxford HLCs will remain standalone products, but where the current type is mapped across the two analysis will draw data from both the city and the county. The reason why the city could not be integrated in the same way as the Chilterns and North Wessex Downs derives from different recording methodologies. In particular, the different ways in which previous types have been recorded by each project. Consequently, whilst it was possible to relate and map current city and county types (again, a concordance table will be included in the final project archive), it was not possible to record previous types within the city. To allow users to find information on previous types, the Oxford HLC unique identification number has been recorded in the summary of each city polygon included in this project. Additionally, in order to preserve these unique numbers and their previous types, no amalgamation of polygons was conducted: the polygons used in this project are the same as those used in the Oxford HLC (Figure 4).

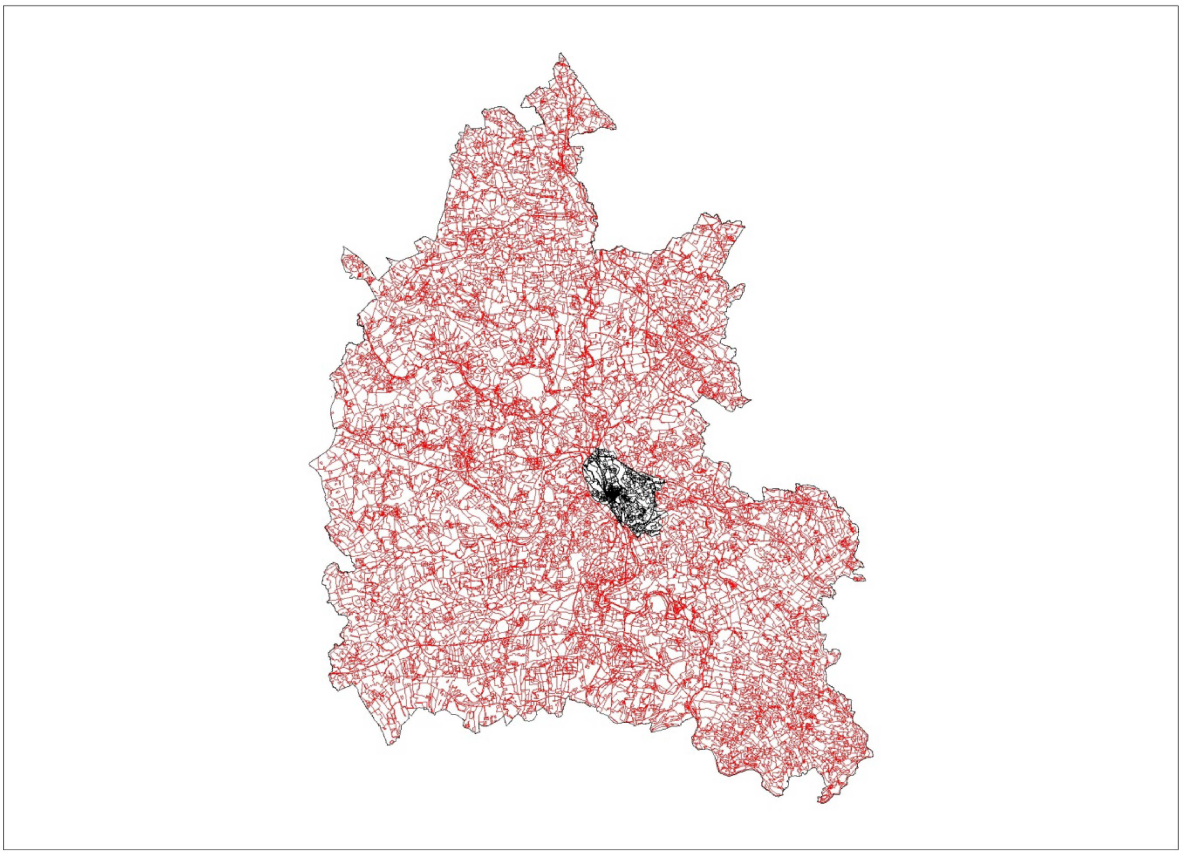


Figure 4: Oxford City polygons integrated into the Oxfordshire HLC

2.2.5 Photographic Survey

The photographic survey to illustrate the different character types in Oxfordshire is still ongoing as it was deemed possible to complete alongside Stages 3 and 4 – Analysis and Reporting. Site visits have begun and Oxford itself has been completed.

2.2.6 Thematic Maps

Two thematic maps have been created for the whole county, one showing the 15 different Broad Types and the other the 110 HLC Types. These will be used to create A3 Iconic Maps to be available by download from the project website. They will also be used in promotional material and for presentations.

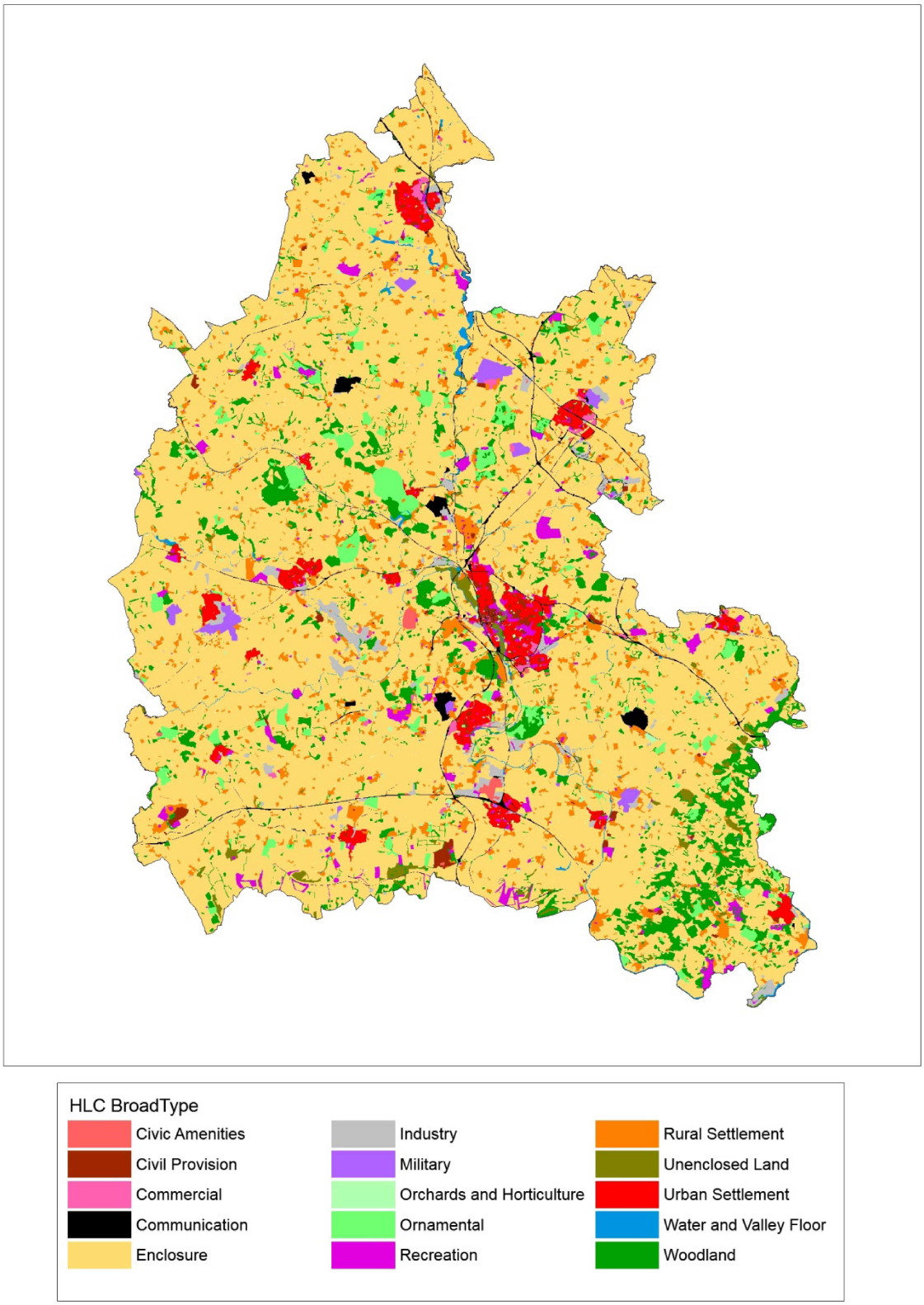


Figure 5: Current Broad Types in Oxfordshire

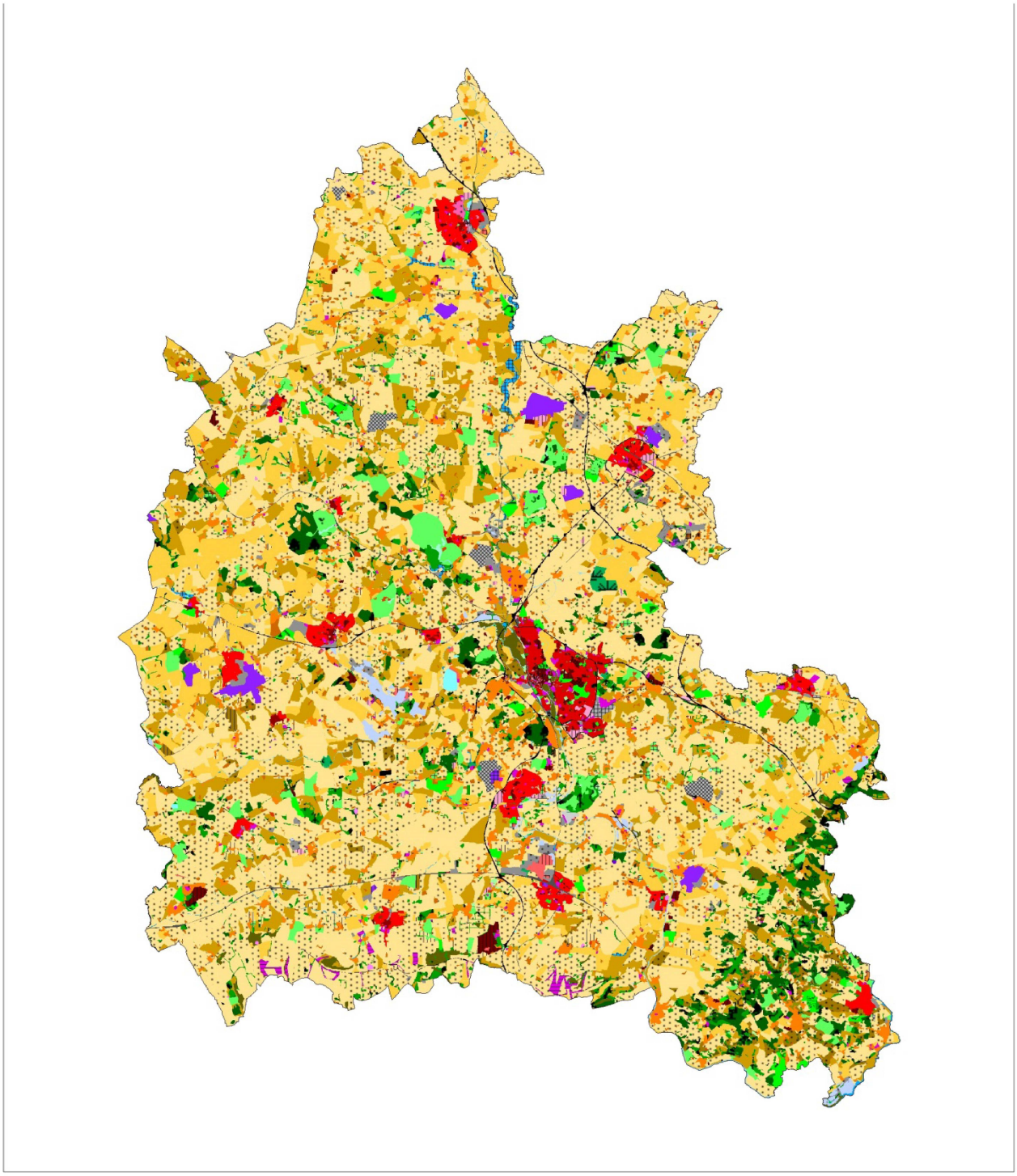


Figure 6: Current HLC Types in Oxfordshire

Figure 7: HLC Types Legend

2.2.7 Stakeholder and Consultation Group Meetings

An additional Stakeholder Meeting was held on the 19th July 2016 to introduce the group to the new HLC Officer and to update members on the general progress of the project. The meeting was also used as an opportunity for the HLC Officer to obtain advice regarding project output and development. The minutes of the meeting are appended below.

No additional Consultation Group Meetings were held by the new HLC Officer as these had been completed by Charlotte Malone for Stage 2.

2.2.8 Stage 2 Final Report

This document constitutes the Final Report for Stage 2 and will be deposited with the project archive.

2.2.9 Updated Project Design

An updated project design was necessary due to a requirement to provide training for the new HLC Officer and to accommodate refined digitisation rate estimates for the remaining part of the county. The updated and approved schedule is included as an appendix to this report.

2.2.10 Highlight Reports

Completed by Charlotte Malone in February and August 2014 and February 2015 and will be deposited with the project archive.

2.2.11 HLC Development and Use

The Stakeholder Meeting of 19th July 2016 raised a number of requests concerning Development and Use, these are summarised in Table 2. As a consequence of these requests a meeting was held between the HLC and HER Officers and OCC ICT. The suggested solutions to the Stakeholders' requests are also summarized below.

Stage 2 Stakeholder Meeting Comments	ICT Meeting Solutions
Reporting in lay terms	N/A
Interactive webpage for public use	HLC Layer to be loaded on to the Inspire Portal and a link will be placed on the HLC webpage. This will enable an interactive map with simple search and query functions
Accessible GIS Layer	HLC Layer will be added to Spectrum for use by all internal OCC Staff.
Data exports with HER consultations	No further actions required by ICT as this can be managed by the HER Officer
'How to' Guide	N/A

Table 2: Development and Use Comments and Solutions

Subsequent to these meetings, and as part of the possible update to Oxfordshire Wildlife and Landscapes Study (OWLS), it has been discussed how the HLC data might be used to enhance the county's landscape designations.

3.0 Project Status

See Updated Project Schedule in the Appendices. Stages 3 and 4 are to complete:

3.1 Stage 3 Analysis

- Frequency and Distribution of HLC Types: allowing assessment of landscape significance
- Trajectories of Change: how the occurrence of HLC Types has changed over time, highlighting those which are decreasing or in danger of disappearing altogether.
- Time-slice maps: showing medieval, post-medieval, and modern landscapes, patterns of change, and enduring landscapes
- Specific Case Studies:
    - Comparing the AONBs and the rest of the county – are there discernible differences or similarities in the trajectories of landscapes with different designations? How to the challenges from these different areas compare?
    - Ancient Enclosure preservation – where are these found? How old are they? Why have they been preserved and how might they best be managed?
    - Oxford rural fringe - how has it changed? What is its capacity to change?

3.2 Stage 4 Reporting

- See 2.2.11 HLC Development and Use above.

Oxfordshire Historic Landscape Characterisation Stakeholder Group Meeting

19th July 2016

Minutes of Meeting

Attendees:
Abi Tompkins (HLC Officer), Mark Connelly (Cotswolds AONB), Martin Small (Historic England), Peter Herring (Historic England), Roger Thomas (Historic England), Henry Oliver (North Wessex Downs AONB), Chris Kenneford (OCC), Elise Batelaan (OCC), Hugh Coddington (OCC), Nick Mottram (OCC), Richard Oram (OCC), Susan Lisk (OCC), Paul Smith (former OCC), Vicky Fletcher (OCC), David Radford (Oxford City), Sally Stradling (South Ox and Vale), Samantha Allen (South and Vale), Dan Carpenter (TVERC), Alex Godden (West Berks CC), Janice Bamsey (West Ox), & Tom Sunley (Wilts CC).

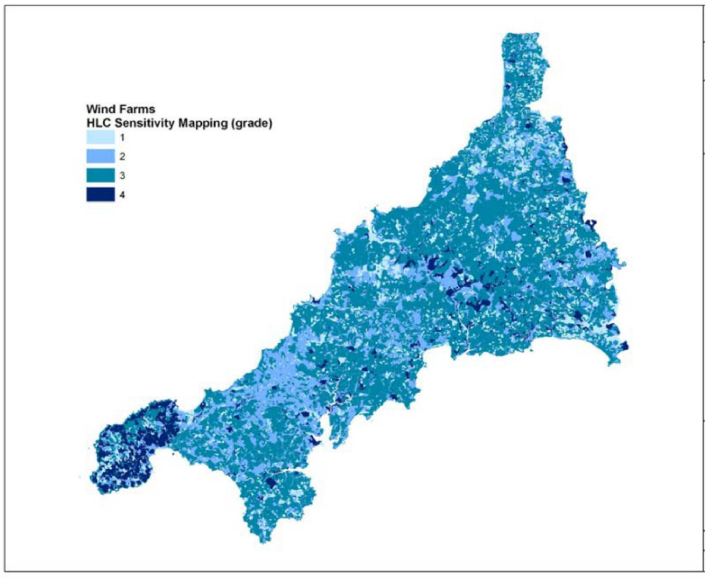
Apologies:
Neil Jackson (Chilterns AONB) & Maria Dopazo (Cherwell)

1) Introduction to HLC – Peter Herring
2) Oxfordshire HLC Progress Report – Abi Tompkins
3) Examples of how HLC data has been used – Abi Tompkins + Discussion
4) Dissemination and Reporting – Discussion
5) Final Comments

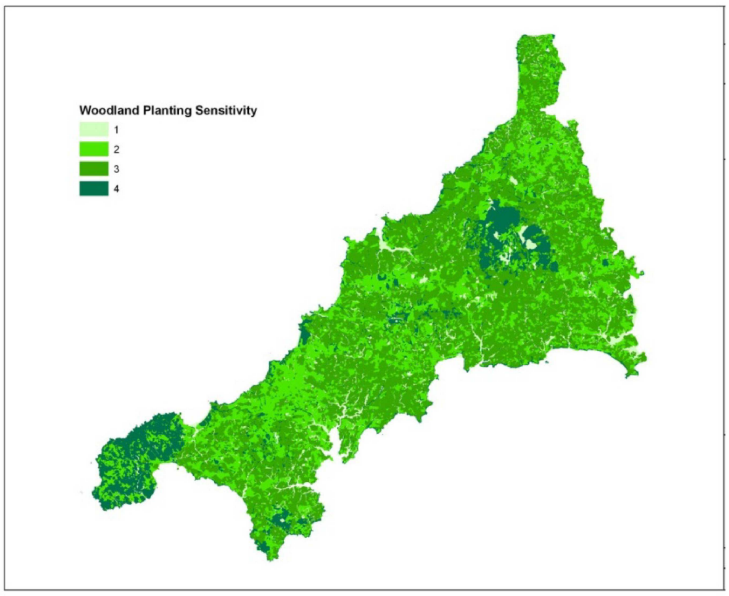
1)Introduction to HLC (P. Herring)

- HLC has over 20 years history; starting in the early 1990s in Cornwall (1994). At a county level, it is now nearing completion, with Oxfordshire completing the coverage of England.
- The next phase is the national programme which will knit together all the county projects into one England-wide product.
- 'Characterisation… raises awareness that the whole landscape is historic… all has historic value and all [parts] should be involved when considering a sustainable future.' Core principles of HLC:
    - Present not past – a spatial framework of current historic understanding, through which the past can be debated and the future better planned for
    - Landscapes not sites – all places have historic character and should be managed accordingly
    - Semi-natural features as well as built environments – hedges, woodlands, lakes all inform character of landscape
    - Characterisation as interpretation – accepts that landscapes can be contested
    - HLC does not ascribe a particular expert view but encourages multiple ways of

evaluating landscape – embracing different points of view, values, scenarios.
    - Landscapes are dynamic and created by change – provides better understanding to make more informed judgements about future change.
- Where HLC data can be/has been used:
    - Inform Landscape Character Assessments
    - Upstream spatial planning (assessing sensitivity; informing strategy, and policy), including Neighbourhood Plans
    - Master-planning
    - Starting point for more detailed character studies and research
    - Contextualising HERs and all other research
    - Public engagement and participation
    - Land management
    - Historic Environment Countryside Advice
    - Partnership building
    - Historic Environment Action Plans (HEAPs)
- Example – Cornwall's sensitivity to specific scenarios:
    - Tall Structures

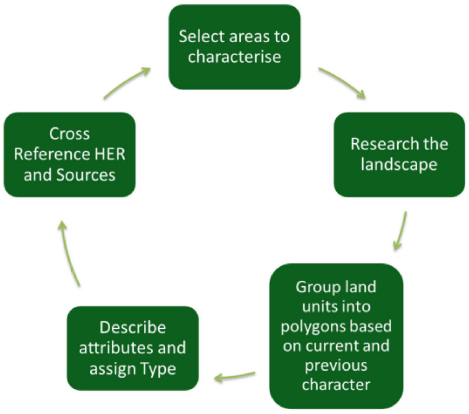


- Woodland Plantations



- What has HLC done?
  - Helped change attitudes to change – now less defensive and more intelligent about it
  - Provided a spatial framework for action planning, eg HEAPs
  - Mapped historic understanding at a scale and in a language that enables closer working with key partners – like natural environmentalists, planners, academics, local community groups
  - Created a spatially organised research framework – stimulates secondary investigation; extending identification and understanding
  - Its predictive qualities increases the volume of archaeological investigation

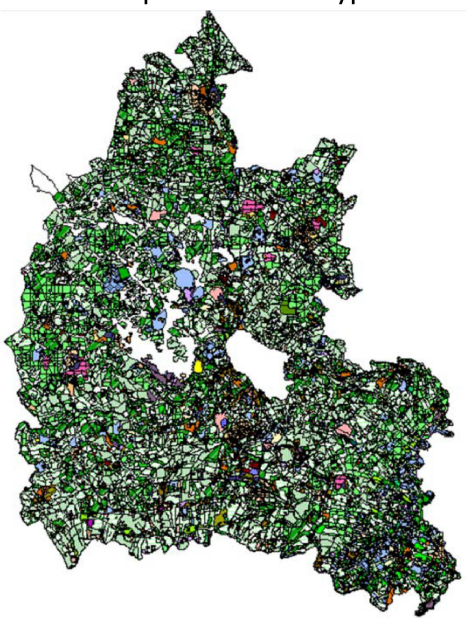
2) Oxfordshire HLC Progress Report (A. Tompkins)

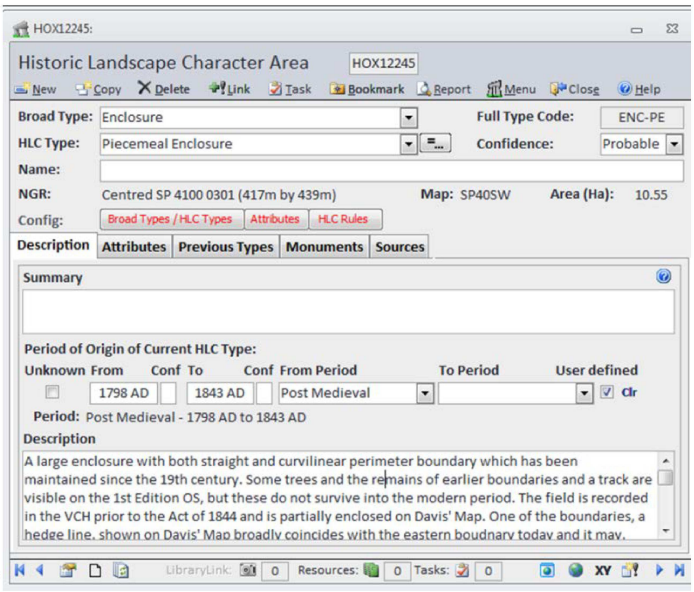


- Stage 2 – Digitisation. Methodology:

  - 94.5% of the County has been digitised – 12,268 polygons digitised

- Each polygon is characterised into one of 15 Broad Types and then into one of over 100 HLC Types, further attributes describing the character are then added along with information on any previous HLC Types





  - The AONB HLC projects from North Wessex Downs and the Chilterns have been integrated and the Cotswolds has been updated
  - A thematic map layer has been created which shows the Broad Types and the Historic Landscape Types
  - Work has begun on the integration of Oxford City
    - The City's HLC was completed in 2014 and needs integrating into the county to ensure consistency of character and grain

  - Recording uses HBSMR database which links to the HER

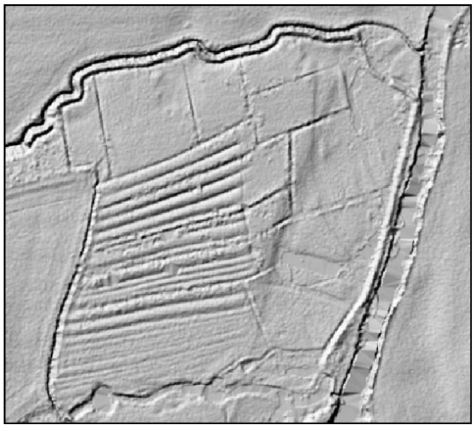
- Stages 3 & 4 - Analysis and Reporting
  - Analysis:
    - Frequency and Distribution of Types - allows assessment of landscape significance. Is a landscape rare or common? Does it have local, regional or national importance?
    - Trajectories of change – are certain types decreasing or in danger of disappearing altogether? Is this significant? Alternatively, which landscape types are increasing and what are the impacts of this?
    - Time-slice maps – showing landscape character in the medieval, post-medieval, and modern periods. Highlights patterns of change and enduring historic landscapes.
    - Case studies (initial thoughts):
      - Comparing the AONBs and the rest of the county – are there discernible differences or similarities in the trajectories of landscapes with different designations? How to the challenges from these

different areas compare?

- Ancient Enclosure preservation – where are these found? How old are they? Why have they been preserved and how might they best be managed?
- Oxford rural fringe - how has it changed? What is its capacity to change?

3) Examples of how HLC data has been used (A. Tompkins)

- Milton Keynes Growth Areas
    - D. Green, as part of the Bucks HLC project, assessed preservation of the historical landscape, presence of historic buildings and archaeological sites, and the aesthetic setting to offer an impact score for each of the potential development areas around Milton Keynes – this was only possible by assessing the frequency and distribution of HLC Types across the county and the trajectory of change around Milton Keynes. This allowed him to assess the significance and the sensitivity of the landscape in specific areas around the city.
- Landscape change in the Salisbury Plain Training Area
    - T. Sunley, as part of the Wilts HLC project, assessed whether military activity was the biggest threat to historic landscape of the SPTA. His analysis showed that whilst the military has unquestionable expanded its presence on the plain, fields and enclosed land has actually had a big impact upon the character of the plain, an area which is one of the UK's last remaining open downlands.
- An example of where it could be used in Oxon – Chimney Preserved Open Field



    - The only observed example of a preserved open field system in the county…

- (T. Sunley) HLC data used to explore Royal forests and parkland in Wiltshire – their preservation and their sensitivity
- (A. Godden) HLC data used extensively within planning, for woodland plantation schemes, informs the Minerals and Waste plans, feeds into Neighbourhood Plans, and is used for community outreach projects
- M. Connelly also emphasised community aspect of people using the data to explore their own landscapes. Intends to use HLC as part of their 'Cotswolds at 50' project which will look at change over the last 50 years.

- H. Oliver said they have also used the data for woodland planting schemes and discussed how it could be used to review settlement boundaries to better inform planning process.

- Future use of HLC:

    - V. Fletcher – to update Landscape Character Assessment
    - S. Stradling – interested in use within planning for S. Oxon and the Vale
    - E. Batelaan – applications within new mineral site assessments

4) Dissemination and Reporting (discussion)

- General comments:
    - report couched in lay terms so understandable to all
    - accessible GIS layer with an identify link to individual records/layer table
    - dissemination of layer and records could be via various methods
        - interactive website – publically accessible, but difficult to manage or control
        - shared GIS layer with associated table distributed using OCC internal system or directly with Districts/AONBs
        - Wiltshire exports records much in the same way as HER
    - Important to include a 'how to use' guide/toolkit with final report
    - Discussions about updating the database
        - Currently no funding for this and, as it stands, this will be a 'snap-shot'
        - Appreciation that this is not ideal and open to discuss suggestions.

5) Final Comments

- It will not be possible to share raw data or GIS Layers until Stage 3 is complete. This is because, without the analysis phase, it will not be possible to asses significance or sensitivity of HLC types and, therefore, of specific landscapes.
- Next Stakeholder Group Meeting will be at the end of Stage 3 – c. Jan 2017
- Please contact Abi Tompkins re these minutes, for further information, or to discuss the analysis stage. abi.tompkins@oxfordshire.gov.uk

Appendix 2

Updated Project Schedule

Author: Abi Tompkins
Date: 17th October 2016 (Updated as of 29th November 2016)

Stage	Product	Description	Status
2	2.1 Digitisation	Cherwell, South, Vale, NWD and Chilterns AONB	Complete
		West	Complete 22/11/16
		'Gaps'	
		Oxford Integration	Complete
	2.2 Photographic Survey	Ongoing – City complete and 1 visit complete	5 days
	2.3 Thematic Map	Using Warks and Wilts as a base	Complete
	2.4 Group Meetings	No end of stage meeting as meeting held in August 2016 to re-engage and introduce AT. Earlier meetings completed by CM	Complete
	2.5 Stage 2 PD update	Full PD update completed by CM, revised schedule completed by AT	Complete
	2.6 Highlights Reports	For financial information, complete by CM	Complete
	2.7 HLC Development	Meeting with ICT regarding dissemination and plan for output	Complete
	2.8 Consultation Responses	Done by CM, no Consultations being accepted by AT	Complete
	2.9 Reports	End of Stage Report	Complete
3	3.1 Integrated HBSMR database	Global update required to link and update all records in MapInfo and HBSMR - Being discussed with Exegesis w/c 17/10/16	2 days
	3.2 Analysis	Distribution of HLC Types	35 days
		Trajectories of Change and Sensitivity Analysis	
		5 x Case Studies: AONB Comparative Study; HLC and Landscape Character Assessment Study; Urban-Rural Fringe Sensitivity to Urban Development Study; HER and HLC Correspondence; Comparing County and City Study.	
	3.3 Analysis Report	Chapter for final report	10 days
	3.4 Group Meetings	Stakeholder Meeting to discuss results	3 days

	3.5 Reports	End of Stage Report and Highlights Report	1 day
4	4.1 Internal dissemination of data	HLC Layer to be uploaded to Spectrum and placed on the B: drive. (Project agreed with ICT 13/10/16)	3 days
	4.2 External dissemination of data	Project with ICT (Anne Kearsley) to upload data to the Inspire platform and to deposit with data.gov.uk (Project agreed with ICT 13/10/16)	5 days
		Publicity	5 days
	4.3 Final Report	Report write up	31 days
	4.4 Summary Report	Summarised document of final report	3 days
	4.5 Iconic Maps	High Resolution Maps – images for website, downloads, and publicity	5 days
	4.6 Project Archive	Products for final archive	10 days
	4.7 Public & Internal Presentations	2 Regional Presentations for public	3 days
		1 Presentation with the University	2 days
		1 Internal Presentation for Planners and DC	2 days
	4.8 Group Meetings	Final Stakeholder Group Meeting and Project Meeting	3 days
	4.9 Launch	Project launch	3 days

Totals

Stage	Days	Completion Date*
2	30 (as of 17/10/16)	5/12/16
3	51	23/3/17
4	75	27/7/17

* Completion dates incorporate Bank Holidays, Annual Leave entitlement, and anticipated ICT problems. Annual leave was estimated at 16 days and ICT problems were afforded 5 days. The 5 days to finish the photographic survey were included in Stage 3.

NB: the 45 days extra required for digitisation and the original 14 days stated (i.e. 59 days) takes the project to the 27/7/17. The new project schedule fits within this timeframe.