Organisation: High Speed 2 (HS2)

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Topic: New approach to understanding Historic Landscape using National HLC datasets (HS2 Phase

2b)

Background

The Phase 2b line forms a Y shape, split into an eastern and a western leg. The western leg will connect to the high-speed lines at Crewe and run through to Manchester. The eastern leg will connect to high-speed lines in the West Midlands and run through to Leeds, with a spur running trains into Sheffield. The geographical extent of the route covers 290km of new build, 30km of existing rail upgrade and a number of off-route works for a range of railway infrastructure, which is divided into 28 community areas. These were then broken into three sections for the impact assessment for delivery to HS2 Ltd by the Environmental Overview Consultant (EOC), and the Civils Design Environmental Services teams (CDES).

Like numerous other projects, HS2 considers the historic environment to comprise three sub-topics of archaeology, built heritage and historic landscape. The assessment of the historic landscape sub-topic on large-scale infrastructure projects has been problematic for a number of reasons, primarily because of the nature of the historic landscape character (HLC) dataset used to inform the assessment. The Historic Landscape Characterisation¹ project was not designed to provide a preferred assessment methodology to be applied in the development of a historic landscape character data set. This means that each county has produced a non-standardised dataset in respect of terminology and symbology; in essence no two counties have directly comparable data. Phase 2b covered 10 unitary authorities, each of which had used a bespoke methodology to create HLC datasets, with the earliest completed in 2000 the latest in 2017. The challenge for HS2, the EOC and the CDES was to be able to compare data in each county across the scheme footprint on a like-for-like basis to enable the assessment of value, and to determine the significance of effect of the Proposed Scheme.

The approach

A solution to standardised terminology was found in the National HLC (NHLC) project completed by Natural England in 2017.² This project compiled a national HLC dataset, drawing together the existing sub-regional HLC datasets and applying a common framework, structure and terminology to a new unified dataset. This provided a common language that could be consistently applied across all data regardless of where the character type had been created. A further development was to build on the work of Phase 2a of HS2, which developed Historic Landscape Character Areas (HLCAs) that are larger areas that define areas of coherent or distinctive historic landscape characteristics.³ These HLCAs define the character of an area and allow for large-scale spatial understanding of a landscape in identifying its surviving historic components and time depth. In its raw format the NHLC data provided was in a grid formation, which meant the team were unable to use the spatial data to create HLCAs; however, as there was a shared terminology the project team was able to undertake a concordance exercise. Given the area covered by Phase 2b, this in itself was a large undertaking and was done on a

 $\underline{\text{http://sciencesearch.defra.gov.uk/Default.aspx?Menu=Menu\&Module=More\&Location=None\&Completed=0}}\\ \underline{\text{\&ProjectID=19741}}$

¹ https://historicengland.org.uk/research/methods/characterisation/historic-landscape-characterisation/:~:text=It is a method of,townscape into repeating HLC Types.

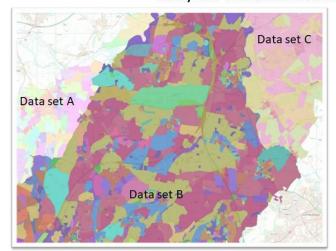
³ https://www.gov.uk/government/publications/hs2-phase-2a-environmental-statement-volume-5-cultural-heritage

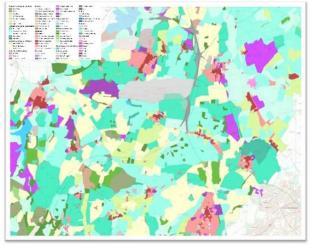
county-by-county basis. Once complete the teams were able to apply the common terminology to create HCLAs using a consistent set of historic landscape character types that could be applied by all three of the CDES teams. The shared standardised terminology allowed each type to be identified, resulting in a coherent method to compare the data (Figure 1). This innovation allowed for the comparison of all historic landscape character types across the scheme regardless of the original terminology applied. The result is a set of HLCAs that demonstrate a clear understanding of the historic landscape character across the Proposed Scheme and allow for a comparative assessment across all areas. Drafts of the Phase 2b HLCA reports were shared with stakeholders, including Historic England, for discussion that fed back into the final product. The feedback from the initial review was positive and recognised the achievement in bringing diverse datasets into a single harmonised resource, and the methodological development this represented.

This piece of work has many strands including providing the basis for a methodology for the approach to assessment of historic landscape in environmental impact assessment. The aim is to share the information with other organisations that create large-scale infrastructure, such as Highways England and the Environment Agency, and to develop its application. Following this, the further objective is that the methodology will become an industry standard and form a lasting legacy within the industry.

Figure 1 County HLCs translated into NHLC terminology (©HS2)

Historic landscape character - How County HLCs translated into NHLC terminology means





HS2 consolidated data County HLCs