

“Modelling Networks: The British Railway System 1845-2012”
Professor Mark Casson
Director of Reading University’s Centre for Institutional Planning

Dr Casson’s talk, dealing with the main influences shaping the British Railway system between 1815 and 1914, covered the development of the rail system in this country from its earliest tentative start with the Stockton and Darlington Railway linking colliery production with urban users. Routes such as these started life as little more than tramway routes serving coal mines and quarries in the mid 1820s. However, within a couple of decades the advantages of railways as a more general form of transport resulted in the rapid expansion of the trunk-line network and increasing competition between towns and cities to attract railways and rail stations as well as aggressive competition between individual railway companies.

Although the railways were largely financed by private capital, new rail lines could only acquire the necessary land rights through compulsory purchase which in turn required approval through parliament. By the 1860s railway project approvals accounted for more than half of all public network infrastructure approvals vastly outstripping approvals for roads, canals and other utilities.

Professor Casson focused in some detail on the development tensions regarding plans for new railways in the Gloucestershire area and in particular the battles between Brunel’s broad gauge Great Western and Robert Stephenson’s narrower gauge plans for a route linking London with Oxford and Cheltenham.

A particular focus of this broad ranging overview of the UK rail system was an investigation into what Casson referred to as the counter-factual modelling of the rail system assuming that the original objectives had been those of building an efficient rail network from the start as opposed to the somewhat ad hoc market driven approach that actually took place. His conclusion was that by 1914 the nation would have been as well served by 13,000 miles of track as by the 18,000 miles existing at that time.

Given on Wednesday 10th April 2013 at the Ashworth Centre