

Transport in the nineteenth century is typically remembered for the arrival of steam-powered locomotives. In addition, a number of provincial stock exchanges were established such as those at Liverpool, Manchester, Leeds, Glasgow and Edinburgh.<sup>35</sup> During the construction of these railways a new class of labourer was born – the so-called 'navigators' or 'navvies'. Gourvish estimates that between 1831 and 1870 an average of 60,000 men were employed in the building of railways – at its peak the figure was nearly three times higher.<sup>36</sup> Prior to 1914 all British railways were erected via private investors with the government at no stage called in to help raise capital. By contrast, in Europe the state played a dominant role at all stages in the building and planning of a rail network. Since each railway line was built and run by an independent company, through trips across the various lines was at first not possible. This changed, however, in 1842 when Glyn and George Stephenson set up the Railway Clearing House. The original members represented nine lines running from London to York and Leeds. This expanded to forty-five lines by 1849. By this stage only the Great Western remained outside the system. Particularly problematic was standardizing the rail gauge, since the Great Western insisted on keeping its wider track and only conformed to the more narrow gauge in the 1870s. In addition, a number of provincial stock exchanges were established such as those at Liverpool, Manchester, Leeds, Glasgow and Edinburgh.<sup>35</sup> During the construction of these railways a new class of labourer was born – the so-called 'navigators' or 'navvies'. Since each railway line was built and run by an independent company, through trips across the various lines was at first not possible. Indeed, for one recent commentator, the combination of improvements to roads and the development of waterways and canals was the primary factor that separated Britain from the rest of Europe and was the crucial factor enabling the Industrial Revolution. To begin with, the local nature of turnpike trusts caused road improvement to be carried out piecemeal and not regularized across the country. However, through lobbying and select committee investigations, something like a national network of roads started to emerge during the 1820s. Gourvish estimates that between 1831 and 1870 an average of 60,000 men were employed in the building of railways – at its peak the figure was nearly three times higher.<sup>36</sup> Prior to 1914 all British railways were erected via private investors with the government at no stage called in to help raise capital. Social hierarchy is classification of society of a nation that segregates the residents of a country into certain groups based on various factors out of which the wealth and occupation play a significant role in this segregation. Road transport during the eighteenth century was generally unreliable owing to the appalling condition of roads and their vulnerability to the notoriously wet British weather. Owing to an old Act of 1555 all road repairs were left to unpaid farmers and local labourers, which meant they generally remained neglected. By the 1830s faith in steam locomotives coupled with an economy that was experiencing good financial conditions helped increase the rate of railway projects. As a result forty-four additional railway acts were passed between 1836 and 1837, with expenditure increasing from GBP1 m in 1834 to GBP9 m in 1839. As a result the vital infrastructure – such as warehouses and loading equipment – was already situated by roads, outports and especially canals. Manufacturers and merchants had already tried to improve the state of roads during the eighteenth century with the creation of turnpike trusts. The length of coastlines around the British Isles in relation to its land size makes them ideally suited to coastal shipping. Engineers such as Telford and McAdam devised new surfaces,

foundations and systems of drainage. During the days of sail its role as a carrier of people was popular, although it tended to be confined to the months between April and October owing to the risk of storms. Indeed, until the arrival of steam-powered vessels it was the weather, along with tides, which in general hampered the use of this mode of transport. The latter marked the height of investment with nearly 7 per cent of national income being drawn in. Indeed, such was the level of investment, it required a restructuring of the British capital market. Particularly problematic was standardizing the rail gauge, since the Great Western insisted on keeping its wider track and only conformed to the more narrow gauge in the 1870s. By the nineteenth century a clear structure and network had already emerged with much of industry having adapted around particular modes of transportation.