Book Review


From Rail to Road and Back Again?

by Gabriel Roth

The main thesis of this fact-filled book is that rail and road networks both compete and interact with one another. Ralf Roth sets out this thesis in its first chapter. His conclusion (page 72) is that “the contemporary dominance of road and air transport is not necessarily the end of the story. Factors such as energy, emissions, limited resources of space, and gaps in capacity might suddenly shift the whole system of global networks into another direction.” This conclusion is not supported by the numerous facts in the 14 chapters that follow.

The book contains a wealth of information on transport in the 19th and 20th centuries. The countries covered include not only the United Kingdom and United States, but also France, Germany, Italy, and other European countries, all of which are usually excluded from books written in English. The main text, which is supported by numerous footnotes, is not confined to road and rail transport. For example, three chapters deal with the design and introduction of containers developed for use by the marine, road, and rail modes, and which still play a key role in their collaboration.

While it is natural that the periods covered by this book are those in which both roads and rails were actively used, the omission of Roman roads, and of the United Kingdom and United States turnpike roads, weakens the book as readers are not reminded that road transport existed for many centuries and in many countries without interacting with rails. An example of this neglect is the statement (page 235) that in the United States, “the pressure for road improvements started with the bicyclists in the 1880s.” Could the authors not have known of the importance of the massive investment in turnpikes in the 19th century United States? In the 10 eastern states alone, in the period 1800-1830, private investment in turnpike roads exceeded, as a proportion of GDP, government expenditure on the construction of the U.S. Interstate Highway System in the period 1956-1995.

The book lacks in-depth discussions of road and rail finances, and the critical fact that today’s passengers are generally willing to pay for roads but not for rails, even though rail transport was developed commercially, and the idea of paying for passenger or freight carriage by rail is generally recognized as acceptable in market economies. Not so with roads. Collecting money for road use depended on toll collection and, until the twentieth century, was practicable only for selected toll roads. However, the 20th century saw the possibility of charging for road use without requiring vehicles to stop to pay tolls. This can be done either by means of surcharges on fuel or tires or, more selectively, by electronic means such as the E-ZPass. The implication of such payments for road use, and for commercial investment in roads, are not explored in the book, though they are likely to influence the conclusion suggested in its title that roads might replace rails.

Another area neglected in the book is the role of government in promoting and/or impeding different transport modes. Thus, in Chapter 1, Roth presents an interesting review of the pros and cons of the mobile steam engines, independent of rails, which were introduced in England in the 1820s and supported by such well-known experts as Thomas Telford, founder of the Institution of Civil Engineers. But Roth does not mention the tolls imposed by Parliament on such vehicles in the 1830s, which were at least six times the levels of the tolls on horse-drawn carriages, although the latter caused much more damage to the roads. Nor does he mention the law, revoked in 1894, which required each motor vehicle moving on a British road to be preceded by a man carrying a red flag.
Those tolls and restrictions, introduced at the behest of rail and horse-carriage interests, delayed the introduction of self-driven mechanical road vehicles by some 60 years. To this day, rails enjoy massive subsidies in Europe and road development is restricted, despite the substantial fuel taxes paid for road use.

Rails provide important services, especially for moving freight over long distances, but the book has little to say about this, even about the splendid freight services developed in the United States. Rails are also strong in providing underground passenger services in large urban areas. But roads (which do not seem to have been defined in this book) have been with us for millennia, while rails for less than two centuries. Unlike rails, roads are used in all countries. Rails cannot function without roads, but roads can function without rails. Rails for passengers are generally provided at a financial loss, roads often at a profit. It therefore seems that rail systems can never replace road systems, and that a better title for this interesting book would have been “From Road to Rail and Back Again?”