Foreword

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The rapid pace of transport development and urban transformation in China has attracted considerable interest, not just from Chinese scholars but also from researchers across the world. The speed of change makes it possible for social scientists to have the rare opportunity of conducting what are, in effect, real-time experiments. Nowhere is this more evident than in the development of a high-speed rail network from nothing to by far and away the largest in the world in little over a decade. The change that this alone has brought about in accessibility and connectivity between cities and the opportunities for redevelopment within cities has been huge. If we add to this the rapid development of some of the largest metro systems in the world in cities like Shanghai and Beijing, the parallel development of major highways, and port expansion to cater for China's emergence as one of the largest trading economies, there is scope for considerable research. However, China's particular political and government systems require the development of approaches and models that respect the differences between China and the more fully market-based systems of most developed countries. Disentangling cause and effect becomes a more complex problem when most land is state-owned and the relationships between the national and local levels in planning decisions are often ambiguous.

These challenges and complexities make this volume both timely and valuable to anyone wanting to understand or undertake research on the processes of transformation in China. The editors and authors come from a range of disciplinary and geographical backgrounds. All are well-known names in their respective fields and many of the chapters are co-authored by Chinese and western scholars, ensuring an international perspective on the issues. The 23 main chapters (there is also an introduction and a concluding chapter) divide usefully into four sections. The first deals with a range of issues relating to transport planning and the impact on urban structure covering the main modes, including non-motorized modes and not forgetting the issues relating to rural transport. Part II deals with environmental issues and as well as studies of pollution includes the impact of new technologies on mobility. Part III considers the social dimensions of growing mobility and satisfaction with travel as well as the parallel problem of inequality in access to good transport opportunities. Finally, Part IV outlines some of the governance and policy issues including the problems of comparative research and the potential for policy transfer from China to countries at an earlier stage of development.

Distilling the key messages from this rich set of resources is not straightforward. This reflects in part the huge diversity of a country the size of China. Unsurprisingly studies of Beijing and Shanghai dominate but other large cities such as Guangzhou, Xi'an and Suzhou also feature. In the background are the market-based reforms of the national economy and the structural reforms in the rail sector that have both enabled and constrained the pace and direction of change. As the basis for future research, the Handbook is a valuable starting point. It gives a clear picture of the current situation, both in terms of the impacts of transport investment of various types to date and the policy and planning

framework within which they sit. It suggests ways in which, for example, new technologies could transform mobility demand and the transport needs to match them. It raises the interesting question of whether China will replicate the trajectories of the most advanced economies, albeit in a much shorter timeframe, or start to follow a different trajectory, omitting some of the more awkward stages experienced by these economies, such as the debates over automobile dependency and sustainable mobility. And will China's responsibilities to the international community over air pollution and global warming constrain progress or accelerate the search for an alternative model?

The Handbook also raises many questions that are still to be resolved. First and foremost is the extent to which the conventional paradigms employed by those researching the effect of transport on economic performance, regional diversity and social equality can be applied to the Chinese situation. Many of the authors in this Handbook provide hints towards a solution, but there remains a big research agenda, not least if there are to be attempts to transfer the Chinese model to other parts of the world. Second, the contributions here address mainly internal Chinese questions. Given that China is such a large country this is understandable, but the key feature of the past three decades has been the opening of China to the world through trade and investment flows. To take one example, how will the Belt and Road Initiative impact on the more local and regional cases examined here, and how will China's use of the initiative to increase its international presence impact on the internal issues addressed here? Third, how far is it likely that China looks to international financial markets to plug the increasing gap between the need for more investment and the capacity of the public finances and will that constrain the social dimension of current transport planning with an increased emphasis on profitability?

Researching these outstanding questions and many more requires the firm basis in the current situation and that is exactly what this Handbook provides. It is an essential tool both for those already fascinated by the rapid changes in China and for those wishing to understand more about the Chinese model.