

CONTENTS

<i>List of Tables</i>	<i>xi</i>
<i>List of Figures</i>	<i>xiii</i>
<i>About the Contributors</i>	<i>xix</i>
Chapter 1 Introduction <i>Simon Blainey and John Preston</i>	<i>1</i>
Chapter 2 System and Route Planning <i>Simon Blainey</i>	<i>5</i>
Chapter 3 Railway Station and Interchange Design: A Station Design that Perfectly Fits the Quality Needs of Passengers <i>Mark van Hagen</i>	<i>19</i>
Chapter 4 Community Rail: Helping Our Railways to Deliver Social, Environmental and Economic Sustainability <i>Jools Townsend</i>	<i>41</i>
Chapter 5 The Railway Track System: Performance and Trackbed Design <i>Louis Le Pen and William Powrie</i>	<i>61</i>
Chapter 6 Railway Earthworks: Design and Performance <i>Joel Smethurst and William Powrie</i>	<i>91</i>
Chapter 7 Noise and Vibration <i>David Thompson and Giacomo Squicciarini</i>	<i>113</i>
Chapter 8 Rail Vehicle Dynamics <i>David Thompson and Giacomo Squicciarini</i>	<i>133</i>
Chapter 9 Passenger Rolling Stock <i>Mark Robinson and John Roberts</i>	<i>149</i>

Chapter 10 Sustainable Urban Railways <i>Peter White</i>	171
Chapter 11 High-speed Rail <i>Andrew Mcnaughton</i>	187
Chapter 12 Capacity, Timetabling and Sustainability <i>John Armstrong</i>	203
Chapter 13 Signalling and Traffic Management <i>Jörn Pachl</i>	221
Chapter 14 Towards a Sustainable Digital Railway <i>Heather Steele and Clive Roberts</i>	239
Chapter 15 Regulation, Organisation and Governance for Sustainable Railways <i>John Preston</i>	265
Chapter 16 Towards a Financially Sustainable Railway <i>Jonathan Cowie</i>	281
Chapter 17 Rail Safety <i>Andrew W. Evans</i>	295
Chapter 18 Interior Passive Safety <i>Mark Robinson and John Roberts</i>	305
Chapter 19 Conclusions <i>John Preston and Simon Blainey</i>	325
<i>Index</i>	331