

Table of Contents



Foreword	3
Chapter 1 THE NEW ROLE of URBAN RAIL	5
Chapter 2 SHAPING CITIES	9
Chapter 3 CONSTRUCTION and OPERATION of the NEWARK CITY SUBWAY	18
Chapter 4 PCCs, SYSTEM RATIONALIZATION, CONVERSION to LIGHT RAIL, and EXPANSION	28
Chapter 5 NEWARK LIGHT RAIL: CURRENT OPERATIONS	44
Chapter 6 THE BROAD STREET EXTENSION: WHY a STREETCAR?	54
Chapter 7 ENGINEERING for EFFECTIVE OPERATIONS: THE CONTINUUM of RAIL MODES	60
Chapter 8 ENGINEERING for EFFECTIVE OPERATIONS: ADVANCED CONCEPTS of TEMPORAL SEPARATION	66
Chapter 9 TECHNOLOGY and OPERATIONAL CONSIDERATIONS: TRACK and LRV ISSUES	78
Chapter 10 SIGNALIZATION and OPERATIONAL PERFORMANCE	94
Appendix A Track Considerations	128
Appendix B Signalization, Operating Practices and Transit Capacity	132
About the Authors	136
Acknowledgements	136