

# Cycling for Sustainable Cities

Edited by Ralph Buehler and John Pucher

The MIT Press  
Cambridge, Massachusetts  
London, England

\_\_\_-1  
\_\_\_0  
\_\_\_+1

© 2021 Massachusetts Institute of Technology

All rights reserved. No part of this book may be reproduced in any form by any electronic or mechanical means (including photocopying, recording, or information storage and retrieval) without permission in writing from the publisher.

This book was set in Stone Serif and Stone Sans by Westchester Publishing Services. Printed and bound in the United States of America.

Library of Congress Cataloging-in-Publication Data

Names: Buehler, Ralph, editor. | Pucher, John R., editor.

Title: Cycling for sustainable cities / edited by Ralph Buehler and John Pucher.

Description: Cambridge, Massachusetts : The MIT Press, [2021] |

Series: Urban and industrial environments | Includes bibliographical references and index.

Identifiers: LCCN 2020012187 | ISBN 9780262542029 (paperback)

Subjects: LCSH: Bicycle commuting—Social aspects. | Bicycle commuting—Health aspects. | Urban transportation—Environmental aspects. | Sustainable urban development.

Classification: LCC HE5736 .C9284 2021 | DDC 388.3/47—dc23

LC record available at <https://lcn.loc.gov/202001218787>

10 9 8 7 6 5 4 3 2 1

-1\_\_\_  
0\_\_\_  
+1\_\_\_

## Contents

Editors	ix
Contributors	xi
Preface	xv
Acknowledgments	xvii
<b>1 Introduction: Cycling to Sustainability</b>	<b>1</b>
John Pucher and Ralph Buehler	
<b>2 International Overview of Cycling</b>	<b>11</b>
Ralph Buehler and John Pucher	
<b>3 Cycling and Health</b>	<b>35</b>
Jan Garrard, Chris Rissel, Adrian Bauman, and Billie Giles-Corti	
<b>4 Cycling Safety</b>	<b>57</b>
Rune Elvik	
<b>5 Bicycling Infrastructure for All</b>	<b>81</b>
Peter G. Furth	
<b>6 Bicycle Parking</b>	<b>103</b>
Ralph Buehler, Eva Heinen, and Kazuki Nakamura	
<b>7 Programs and Policies Promoting Cycling</b>	<b>119</b>
Eva Heinen and Susan Handy	
<b>8 Evaluation of Cycling Policies and Projects</b>	<b>137</b>
Bert van Wee	
<b>9 E-bikes in Europe and North America</b>	<b>157</b>
Christopher R. Cherry and Elliot Fishman	
<b>10 Bikes sharing's Ongoing Evolution and Expansion</b>	<b>173</b>
Elliot Fishman and Susan Shaheen	

\_\_\_-1  
\_\_\_0  
\_\_\_+1

- 11 Women and Cycling: Addressing the Gender Gap** 197  
Jan Garrard
- 12 Children and Cycling** 219  
Noreen McDonald, Eleftheria Kontou, and Susan Handy
- 13 Older Adults and Cycling** 237  
Jan Garrard, Jennifer Conroy, Meghan Winters, John Pucher,  
and Chris Rissel
- 14 Social Justice and Cycling** 257  
Karel Martens, Aaron Golub, and Andrea Hamre
- 15 Cycling in China and India** 281  
John Pucher, Geetam Tiwari, Zhong-Ren Peng, Rong Cao,  
and Yuan Gao
- 16 Cycling in Latin America** 301  
Carlosfelipe Pardo and Daniel A. Rodriguez,  
with Lina Marcela Quiñones
- 17 Cycling in New York, London, and Paris** 321  
John Pucher, John Parkin, and Emmanuel de Lanversin
- 18 Cycling in Copenhagen and Amsterdam** 347  
Till Koglin, Marco te Brömmelstroet, and Bert van Wee
- 19 Implementation of Pro-bike Policies in Portland and Seville** 371  
Roger Geller and Ricardo Marqués
- 20 Cycling Advocacy in Europe, North America, and Australia** 401  
John Pucher, Bernhard Ensink, Tim Blumenthal, Bill Nesper,  
Ken McLeod, Andy Clarke, Jean-François Pronovost,  
Dave Snyder, Robin Stallings, Fiona Campbell, and Peter Bourke
- 21 Cycling to a More Sustainable Transport Future** 425  
Ralph Buehler and John Pucher
- Index 441

-1\_\_

0\_\_

+1\_\_